

PUBLIC HEALTH IS A PUBLIC RESPONSIBILITY



# HEALTH NOTES

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This Bulletin will be sent to any address in the State free of charge.

In case of outbreaks of smallpox, typhoid fever, diphtheria, scarlet fever, or any contagious disease, report to the State Health Officer, Jacksonville, and, if necessary, a medical officer will be detailed to take charge.

If you wish to know how to avoid tuberculosis, typhoid fever, malaria, hookworm, smallpox, diphtheria, etc., address the State Health Officer, Jacksonville.

If you think you have tuberculosis, typhoid fever, malaria, hookworm, or diphtheria, have your doctor take a specimen and send to one of the State Board of Health laboratories for examination.

Anything you want to know about sanitation and public health the Executive Office will try to tell you.

Should you have contagious diseases among your live stock, write to the State Health Officer for advice and help.

Edited by Dr. H. D.  
c/o U.S.M.H. Serv. Bldg.

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 Publication 160, Annual Report State Board of Health of Florida, April, 1916, pp. 256.  
 Publication 161, A Model Sewage Disposal Plant for a Rural Dwelling, Reprint Vol. XI, No. 3, March, 1916 Health Notes, pp. 6 (illustrated).  
 Publication 162, Tick Eradication, Reprint Vol. XI, No. 3, March, 1916, Health Notes, pp. 14.  
 Publication 163, Hog Cholera, pp. 30.  
 Publication 164, Annual Report of Veterinary Department, 1915, Reprint from 27th Annual Report of the State Board of Health, April, 1916, pp. 56.  
 Publication 165, Annual Report of Crippled Children Treatment, 1915, Reprint from 27th Annual Report State Board of Health, April, 1916, pp. 6, illustrated.  
 Publication 166, Vital Statistics, 1915, Reprint from June, 1916, Health Notes, pp. 44.  
 Publication 167, What You Should Know About Tuberculosis, Aug., 1916, pp. 32.  
 Publication 168, "A Health Sermon," Reprint from June, 1916, Health Notes, pp. 6.  
 Publication 169, "Sterilization of Water," Reprint from Oct. 1916, Health Notes, pp. 5.



## COMMON COLDS

The most prevalent illness in the United States is the common cold, a disease group included under one name and considered of such minor importance that vital statistics do not record the enormous number of persons who annually are subjected to suffering, inconvenience, and economic loss thereby. Remarkable as it may seem, the widespread familiarity with this condition has bred a contempt which hides its seriousness, yet when the sum total of the ravages committed by common colds is made, it becomes evident that instead of being a group of trivial affections, common colds must be classed as serious diseases.

The phrase "common colds" like "charity," covers a multitude of sanitary sins, and curiously enough, the name has been applied to a group of affections which far from depending absolutely on cold are frequently the direct result of living in close, overheated surroundings having a lower relative humidity than the driest desert known to man.

The word "cold" means an acute infection of the lining membranes of the nose, tonsils, throat and larger bronchial tubes. The process may be even more extensive and amount to a general infection of the entire body. All of the breathing apparatus excepting the smaller terminal portions in the lungs may be involved, and as a matter of fact the disease may, and often does, spread to these, thus producing pneumonia. In this connection it may be pointed out that pneumonia kills more people in the United States than any other disease excepting tuberculosis and heart disease. Many pneumonias begin as a common cold. Colds do not produce tuberculosis, yet unfortunately what is considered as a cold may be in reality the first symptoms of the white plague.

The causes of colds are multiform and not entirely understood. In every case, however, they are dependent upon the growth and activity of living germs which are always received from other people. It is true, that almost everybody harbors disease organisms in the mouth and nose, and that these under favorable conditions will produce a cold in their host. But these germs in every case were received from some other person. In other words, colds are infectious. It used to be thought that sitting in a draft or a prolonged stay in the swimming pool would produce a cold. This is erroneous, but the chilling of the body which the draft produces and the weakening of the vital forces caused by too long a swim, lower the powers of resistance and permit germs which have hitherto been harmless to their host, to produce their disastrous effects.

It is not necessary to describe a cold. Everybody is familiar with it in all its variations, from the simple ordinary coryza, which is a

polite running at the nose, to the sore throat, the aching chest, fever, and generally "knocked out" feeling. The cough, the sneeze, the headache and the varying degrees of inefficiency which a cold produces are, alas, only too well known. Common colds occur in epidemics and are distinctly contagious. They sweep through an entire household, an entire city, an entire state, attacking the young, the adolescent, the middle aged, and frequently carrying off the aged, the weak and the debilitated. Schools, factories, stores are suddenly crippled by epidemics of this sort and the complications and serious disorders following the disease add to the great economic loss produced in this way. Infection of the cavities beneath the cheeks and brows, ear derangements, chronic lung infections, rheumatism, heart disorders, kidney impairment and depressed vitality may all follow in the train of this widespread infection.

To prevent a cold it is necessary first of all to keep the body resistance at a high point of efficiency. This means that the body machinery should be kept in good order at all times. Good wholesome food in proper amount, plenty of sleep, the careful attendance to the voiding of the body wastes, the taking of regular exercise in the open air, keeping the body clean, keeping the mouth and nose clean, the avoidance of hot, stuffy, dusty rooms, the avoidance of exposure to sudden changes of temperature, the prevention of the chilling of the body either by cold or wet, are all protective measures. It should be borne in mind, however, that even robust persons may contract colds from people who have them.

The germs of colds leave the body in the secretions of the mouth and nose. They enter the body through the same route. Thus a careless sneezer and the person who does not cover his mouth and nose when he coughs are breeders of these infections. The little living bodies which cause colds are so small that a million could rest on the head of a pin. When a person coughs or sneezes a fine spray carrying with it untold numbers of these germs is spread into the surrounding atmosphere to a distance of several feet and may be easily taken into the mouth and nose with the respired air. More direct contact such as by kissing, the common drinking cup, the common roller towel, by pipes, toys, pencils, fingers, food, and other things which have been contaminated by the mouth and nose secretions of a person having a cold may also carry the disease.

It is an obligation on the part of persons having colds to see to it that they do not spread these colds to somebody else. The person who neglects to cover his nose and mouth when he sneezes and coughs, the careless spitter, the person who permits his germ-laden discharges to contaminate things which are going to be handled by other people is a

menace to the community. If such a person uses public swimming pools, if he is not amenable to reason and persists in distributing his infection, he should be avoided as a spreader of pestilence.

A good deal has been said about hardening people so that they will not contract colds. There is an element of danger in this since to expose a weak person to the rigors of cold baths and cold drafts is apt to lower resistance, thus favoring the very condition which it is desired to avoid. At the same time, it should not be forgotten, that the Arctic explorer does not ordinarily have colds so long as he stays out in the open and that it is not the engineer and fireman in the cold, drafty cab who have colds but those who ride in the close, dusty, overheated coaches behind. When all is said, it must be admitted that dusty, unventilated rooms perhaps play the greatest role in producing colds.

Since colds are a serious condition they should be treated as such. A great many people think that they have an infallible remedy for breaking up a cold. This may be harmless in itself but usually it is not and consists of a combination of harmful drugs and alcohol, the latter usually preponderating. The sufferer takes these preparations in large quantities and if he is strong enough he may survive them and eventually get the best of his cold. Self medication or medication by untrained persons is always dangerous. It is especially dangerous to those having colds and should always be scrupulously avoided. As a rule, much time, inconvenience and suffering will be obviated by consulting an intelligent physician promptly. If this is not practicable a brisk saline may be taken and the patient put to bed. This gives his body an opportunity to regain its vitality and at the same time isolates him from other people. The sick room should be well ventilated and the windows so opened as to keep the air moving freely. It is also wise to moisten the air a little bit by putting a pan of water on the radiator or over the register or on the stove. The handkerchiefs and bedding used by the patient should be sterilized by boiling. Kissing, and the use of drinking cups and towels, etc., in common with other members of the household should be forbidden, it being borne in mind constantly that colds are infectious and readily spread from one person to another.

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### WORRY

Consider the automobile. When the car is going to stand still for more than a few minutes the driver stops the engine. By doing this he saves gasoline, oil, and above all, useless wear and tear on the machinery. If he lets the engine "run idle" he has wasted a lot of valuable material, shortened the life of his engine and in the meantime the automobile hasn't budged an inch.

The birds build nests for the protection of their young against the weather; the foxes dig holes for security against foes; the squirrels lay by stores of nuts against the coming of winter; and dogs bury bones against the day when bones will be scarce. These are the manifestations of a normal protective instinct arising from an experience of many, many generations. So far as is known though, no bird ever tried to build more nests than his neighbor; no fox ever fretted because he only had one hole in which to hide; no squirrel ever died of anxiety lest he should not lay by enough nuts for two winters instead of for one; and no dog ever lost any sleep over the fact that he didn't have enough bones laid aside to provide for his declining years.

This protective instinct is also present in the human mind and when properly directed is a great source of prosperity both to the individual and the nation. In order for man to store up and lay by, to gain advancement either in honor or material things, it is necessary that he take some forethought of the morrow, but just so soon as he carries this beyond the normal point the mental process becomes an exaggerated and abnormal one. The normal protective instinct is stimulated by a normal fear of those events which are reasonably sure to happen in the future unless means are adopted against them. The moment that this fear becomes abnormal or exaggerated it over-stimulates this protective instinct and to no good purpose because it results in worry. This worry continues long after the necessity for the normal stimulus of fear has passed, with the result that there is an impairment in mental power and a dissipation of the nervous forces. In other words, the mental engine has been "running idle" and at the same time delivering no propulsive power. In fact, worry is an abnormal state.

Not all worry is preventable but for the most part it can be avoided. Most of our fears are never realized, and as a rule, if we meet our troubles day by day as they come without worrying about them before they arrive or fretting over them after they have passed, we will find that we have the strength to rise above them. Worry undermines the health to a certain extent. It really weakens the mental forces by tiring them out by doing nothing. Usually the relief from worry rests with the victim of this unhappy habit himself, but sometimes the real causes are not the ones which seem to explain the condition and we must go deep into our lives or have the assistance of those who are skilled in unraveling mental processes.

The best antidote for worry is a change of mental occupation, a getting away from the scenes which provoke worry, exercise in the open air, a good book, a pleasant recreation, or a temporary change of occupation. As a matter of mental health every sufferer from this unfortunate condition owes it to himself to discover some simple means of getting away from this habit which is destructive to health and peace of mind alike.



## TAKE CARE OF THE HUMAN FURNACE

Consider the furnace. Theoretically this is a machine for the economical production of heat. If the proper amount of the proper kind of fuel is properly put into it, if the ashes are properly cleaned out, if the drafts are properly managed, the chances are that it will heat the house properly. If, on the other hand, too much or too little fuel is put into it, if the fuel contains too much noninflammable material, if the fire is not kept clean of ashes, or if the dampers are badly regulated, the furnace operates inefficiently or ceases working altogether. Perhaps the most important thing next to putting in the fuel is to clean out the ashes. If these are allowed to accumulate in the ash pit, the grate bars may be burned out.

Food is taken into the human body for the purpose of producing heat. The standard of its value is the number of heat units it contains. If too little fuel is taken into the human body an insufficient number of heat units to operate it are received and it works inefficiently. If, on the other hand, too great an amount of food is taken, the body becomes clogged and works just as inefficiently as if it had received too small an amount. The most important thing is to remove promptly all of the waste materials remaining after the food has given up its heat units. If too great an amount of this debris is allowed to remain the fires of the body are in danger of being put out by these poisonous materials. The elimination of these materials is one of the functions of the intestinal canal. One of the requisites of good health is an educated intestinal apparatus. Perhaps this is even more important than an educated set of brains. Certainly an educated set of brains cannot work effectively so long as the intestinal apparatus is badly operated.

Man in our present state of civilization is obliged to pay particular attention to functions which in a state of nature took care of themselves. A robust man engaged in active exercise in the open air may commit dietary indiscretions which would be exceedingly harmful to a sedentary worker. Exercise as a part of the daily life is, however, absolutely necessary for both. Plain, wholesome food is just as necessary for the brain worker as for him who labors with his hands. Above all, both must keep the human furnace well shaken down and without accumulation of ashes and debris in order that the fires of life may burn brightly and steadily.

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## BAD TEETH AND RHEUMATISM

A few years ago when attention was first called to the fact that rheumatism was often caused by defective teeth, it was something new even to the medical profession. However, modern medicine, soon accepted the fact, the truth of the statement having been well tested, and is now much concerned with the prevention of diseases at this source. The laity too are accepting the fact and are waking up to the seriousness of its meaning.

That a decayed tooth could cause anything so serious as joint rheumatism was hard to believe, so investigations were made to see just how the teeth, tonsils, gums and other parts of the mouth when

diseased affected the different parts of the body. The results of the investigations have been astonishing. It was found that oral infections, such as bad teeth, diseased tonsils and suppurating gums, caused by Rigg's disease or abscesses, not only cause muscle and joint rheumatism, but kidney troubles—nephritis or Bright's disease—heart infections, stomach ulcers, diseases of the blood vessels, glandular infections, skin diseases, including boils, and various infections of the nervous system such as neuritis, neuralgias and sciatica.

Bad teeth are no longer the innocent deformities they were once thought to be. They disqualify men for the army, children for school and men and women for a long useful life. Besides harboring disease germs in their cavities, they hinder the proper chewing of the food, which in turn hinders proper digestion, and nutrition. Like diseased tonsils and spongy pus-forming gums, they create poisons that are devitalizing and deadly to the other members of the body.—*Press Service, North Carolina State Board of Health.*

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### **BACTERIOLOGICAL FINDINGS IN CEREBRO-SPINAL FLUID IN POLIOMYELITIS**

John W. Nuzum, *Journal American Medical Association*, November 11, 1916, page 1,437.

A report of the findings in fifty cases, confirming previous reports of a polymorphous streptococcus as the cause of poliomyelitis. The organisms were grown in ascites dextrose broth, ascites broth, human ascitic fluid and ascites broth, to which a sterile piece of rabbit's kidney was added. Later they were sub-cultured on glucose agar slants. Animal inoculations produced paralysis in monkeys, young lambs and rabbits. Ninety per cent of the cases with clinical symptoms of poliomyelitis gave positive cultures.

As a routine procedure these cultural methods will probably be of considerable value in making a diagnosis in doubtful cases.

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### **CAUTERIZATION OF WOUNDS INFECTED WITH RABIES VIRUS**

Results obtained from experiments on three series of eight guinea pigs show that 75 per cent of the control animals died after an average incubation of 14 2-3 days. Of the animals cauterized with nitric acid only 37.5 per cent died, indicating a saving of 37.5 per cent by means of the acid. Two of the pigs in this group which died or rabies showed an average incubation of 22.5 days, a lapse of time that would permit of a course of Pasteur treatment with a subsequent interval of two weeks for the full development of immunity.

Pigs which had their wounds treated with tincture of iodine showed a mortality of 100 per cent. Seven of the animals had an average incubation period of 18 5-7 days, and one an incubation period of 29 days. The practical significance of these results is indicated.—D. W. Poor, (*Collected Studies Bact. Lab., Department Health, New York City, 8 (1914-15) page 111-112.*)

E. G. B.

## Health Briefs

### DO YOU KNOW THAT

Unpasteurized milk kills many babies?  
—

Efficiency decreases as fatigue increases?  
—

Typhoid fever is contracted by swallowing sewage?  
—

Exercise in the open air cures and prevents many ills?  
—

The full pay envelope is the great enemy of tuberculosis?  
—

The maintenance of health is the first duty of the patriotic American?  
—

A reliable disinfectant which may be made for fifty cents per gallon has been devised by the U. S. Public Health Service?  
—

That there may be an increase in pellagra during the coming year on account of the rise in the cost of foodstuffs is the fear expressed in a statement issued by the U. S. Public Health Service. As a result of government researches it was found that pellagra is produced by an insufficient, poorly-balanced diet and that it can both be prevented and cured by the use of food containing elements in the proportion required by the body. The application of this knowledge greatly reduced pellagra in 1916 as compared with previous years. This reduction is believed by experts of the Public Health Service to have been due to improved economic conditions which enabled wage-earners to provide themselves with a better and more varied diet and to a wider dissemination of the knowledge of how the disease may be prevented. It is feared, however, that pellagra may increase in 1917 by reason of an increase in food cost out of proportion to the prosperity now enjoyed by this country. The great rise in the cost of forage, particularly cotton seed meal and hulls, is causing the people in many localities to sell their cows and thus there is danger that they will deprive themselves of milk, one of the most valuable pellagra preventing foods. The high cost of living has further served to bring about a reduction in many families in the amount of meat, eggs, beans and peas consumed, all of which are pellagra prophylactics. In effecting economies of this nature the general public should bear in mind the importance of a properly balanced diet and refrain from excluding, if possible, such valuable disease preventing foods. It is believed that unless this is done there will be a greater incidence of pellagra next spring.

## Sanitary Engineering Notes

January was a month of increased activity in the Bureau of Engineering. During this period sanitary investigations were conducted at:

1. St. Petersburg,
2. High Springs,
3. Clearwater,
4. Florence Villa,
5. Winter Haven,
6. Lackawanna.

At St. Petersburg advice and recommendations were made relative to the city's proposed sewage disposal plant. This city with its fluctuating population, has a peculiar problem with which to deal and some little study will be necessary to eventually select the sewage disposal system most suitable for the demand, a system which will be both economical and highly efficient.

At High Springs recommendations were forwarded pertaining to the water supply improvement and privy construction. A liquid chlorine sterilization plant has been recommended at this point.

At Clearwater a detailed survey was made into privy construction, operating sewage disposal plant of the Imhoff type and water supply. Numerous Stevens cans are employed here. Further data is being compiled regarding refuse disposal with a view of lending advice concerning the installation of a garbage incinerator.

At Florence Villa hotel, recommendations were made for the proper improvement of a sewage disposal filter which at the time of this investigation was badly clogged.

At Winter Haven the garbage disposal problem is receiving attention relative to the installation of an incinerator. Sewerage will also be planned for this progressive city soon.

In the Lackawanna district of Jacksonville a sanitary survey was conducted relative to school sanitation and cleaning of ditches in the community. At this writing the advised recommendations have been executed in an excellent manner.

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Over 200 samples of water were examined in our laboratory, also several samples of sewage. Such an amount of work is encouraging and we court still more.



## THE COUNTRY COULD BE RID OF FLIES FOR LESS MONEY THAN IS SPENT FOR SCREENS

### THE TYPHOID FLY

Winter lays its garments by:  
Here we come, the Spring and I.  
Let me introduce myself:  
Gentlemen, the Fly!

Busy agent of our firm,  
Ready for the summer term;  
Let me introduce my pal—  
Gentlemen, the Germ!

Let us enter, if you please  
We'll deliver, at our ease,  
Our supreme commodity—  
Gentlemen—Disease!

The slogan a few years ago, when the country was first awakened to the dangers of this pest, was "swat the fly!" Dr. Howard, in a recent lecture, objects to this, as a false measure; and indeed it has already given way to the more progressive phrase, "Prevent the Fly."

### SPEND MILLIONS ON SCREENS

The people of this country spend \$15,000,000 a year on screening, according to Dr. Howard, who said that the whole country could be rid of flies for less than this sum. And that time is coming, he thinks, when we shall not only be able to do without screens in our houses in summer, but shall be able, if we choose, to expose food once more in the open markets, as of old. It is only a question of everyone co-operating, for nothing can be accomplished except by concerted action.

The dangers and the wonders of the fly have been kept continually before the public during the past few years, by means of lectures, printed matter distributed by women's clubs. Boards of Health, schools and other agencies, and by exhibits shown at the schools; and even little Tommy and little Jane can tell how many millions of flies a single pair can breed in a season, and how few days it takes for a fly to develop from the egg to the full grown adult, ready to reproduce his kind.

"One infected fly is a greater source of danger than gallons of polluted water," said Dr. Howard, quoting a brother-authority. Several years ago Dr. Howard wrote a book on the House-Fly, which is regarded as authoritative. He explained yesterday that he had been unable to get out a revised edition, but would revise it for his audience, as later discoveries have been made in the meantime.

As flies breed chiefly in refuse, the real problem resolves itself into a question how to dispose of refuse, especially in congested communities, and how to treat manure that is to be used as fertilizer without destroying its fertilizing properties. At one time borax was believed to be the best material, but on experiment it was found that the use of borax retarded the development of vegetable products. Hellebore is now considered the best general treatment for fertilizer, one-half pound being used to about 10 gallons of water for 10 square feet of the refuse. The eggs are laid in the fertilizer, where the larvae develop; and it is in this stage that the fly can be best attacked. Prevent the larvae from ever developing into maggots, or the maggots from developing into winged insects, and you attack the evil as near its source as it can be reached. "Swatting" the few flies that are found in the house during the winter is efficacious; because, although no one knows just where they come from, where they hide, or how they live, it must be from the first few flies of the season that the horde of pests is bred. After this has happened, swatting is of little use.

It has been discovered that the maggots bore to the bottom of the pile in which they are bred, and a method has been developed by which fertilizer can be rid automatically of these creatures. In the first experiments, a quantity of the fertilizer was placed in a small receptacle with an open, or porous bottom, through which the maggots fell into a preparation of kerosene that killed them. On a larger scale, it is now placed on a raised platform, made of slats or bars, and set over a cement trough filled with water and kerosene. The mass is flushed with water occasionally, and the same water can be used automatically over and over.

### TRAVELS ONLY HALF A MILE

This apparatus can be arranged at a cost of about \$25, said Dr. Howard, who added:—

"If you do this you will have no flies about your house at all, unless you have a neighbor within half a mile who neglects to do the same thing."

For the fly seldom travels more than half a mile from the place in which he was bred, and it is comparatively easy to rid a community not too thickly settled of the pests, by a little co-operation. In the city districts this is more difficult to bring about, and the question of garbage disposal is a potent factor in the case.

### FLIES TOWARD THE LIGHT

The fly-trap is a less efficacious measure to take against the fly than prevention, but is at least better than swatting, and until the fly is

exterminated, some such apparatus will be required. Prof. C. F. Hodge of Clark University, Worcester, invented some years ago a fly-trap that shows a thorough knowledge of Mr. Fly's tastes and habits, and is still the best of its kind, according to Dr. Howard. The fly's habits on which Prof. Hodge based his invention are these: He likes garbage, and he naturally flies toward the light. The waste can is therefore fitted with a special cover, which projects over the sides, leaving a space where the fly can easily enter. The trap is attached to the top of the cover, set over an opening, so that the light comes in. When he has gorged to his heart's content, he flies upward—not the way he came in, for he is a stupid creature—but straight up to the top of the trap, where he buzzes and buzzes with futile attempts to get out, until the trap is removed and plunged into a pail of water. So successful is the working of this trap, and of one or two others that Prof. Hodge has concocted, some of them attached to the window, that he has no screens in his own house all summer, and has no flies either.

"The fly question is practically solved," said Dr. Howard, "as far as discoveries are concerned. The only thing is to get people to do what they ought."—Boston Record, Katherine Brooks.

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### THE HOSPITABLE TIN CAN

So much progress has been made in modern sanitation during the past ten years that no well-regulated community now will permit existence of scum-covered swamps in its immediate vicinity. The danger that mosquitoes will carry malaria has come to be quite generally recognized. Yet the fact that this city, that every city, continues to tolerate a thing as bad as swamps must be recognized from a late warning against tin cans issued by the *United States Public Health Service*. We are told that tin cans, accumulating by the thousands in the city and outskirts, afford the finest kind of breeding places for mosquitoes and flies.

One need only take a stroll through the outskirts in any direction to find cans lying in great heaps. Casual inspection reveals that many of them are half filled with colored water, precipitated by the winter rains. The coloring emanates from decayed food left in the cans and provides mosquitoes with an unexcelled base of supplies. In fact not even the ordinary swamp offers them such fine inducements for propagation and for disseminating germ-bearing particles among their sworn human enemies in the city. The malaria-bearing mosquito from the blackest swamp is held no more dangerous than the insect from the polluted tin can habitat in the back yard or on the edge of town.

It is recorded that the country spends \$10,000,000 each year screening against flies and mosquitoes. Swat the fly is a slogan which has fairly impressed itself upon the National mind. The annual swat campaign is now upon us, and it will be preceded by a clean-up campaign designed to destroy the breeding places and thus reduce the number of flies that will present themselves before the fretted vision of the swatter. This cleaning up should take the tin can menace into consideration. Cans that must stand a few days awaiting the garbage man should be perforated in order to avoid accumulations of rainwater. Dumping of cans anywhere near the city should be not only prohibited, but prevented. The warning of the *United States Health Service* immediately commends itself as in the interest of the public health and, now that we have been fully warned, we should "can" the can.

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### SEWER PIPE FROM LAVA

Hurrah once more for science! It has hit the bull's eye again in a case where the target appeared to be beyond the reach of man.

A wise manufacturer from Ohio is making sewer pipes, and good ones, out of the molten lava scooped from an Hawaiian volcano. Can you beat it?

Why, it seems that on every side of us there has been something valuable lying around loose which has millions in it. An official report shows that northwestern farmers have been throwing away flax straw every year worth a sixth as much as their total crop.

Cottonseed, which a few years ago was considered a nuisance, has become so valuable it can be made to liquidate the entire expense of producing the cotton.

Coal tar products derived from coke—once a total waste—is now worth more than the coke itself.

From the Geodetic survey I learn that 2,000,000,000 barrels of gasoline can be squeezed from the shale rock of northwestern Colorado, and if you drive a car you know Mr. Rockefeller is not giving away gasoline today.—*Philadelphia Public Ledger*.



## Correspondence

### INTERESTED IN HEALTH MATTERS

Dr. Joseph Y. Porter, State Health Officer, Jacksonville, Fla.

Dear Doctor: Since coming to Florida I have been reading some of the issues of "Health Notes" and am very much interested in their contents. If people would take the suggestions and information therein seriously and do their little part, Florida would be a much cleaner and healthier place to live. But the trouble is that the average person on reading these things tries to make him or herself believe that it does not apply to him, and so pass it 'in one ear and out of the other.' For instance, I had occasion recently to speak to a man about handling food before washing one's hands, and he said that idea was "all rot" and that he had read an article by some M. D. saying that the acid from the perspiration of the hands was sufficient to kill any germ that might be on them. I asked him if he believed he knew more about such things than the State Board of Health and the U. S. Public Health Service. I then showed him the article in the August issue of "Health Notes" on "Clean Hands" and he said, "Oh, well, they have to fill it up with something. I get that publication every month. The trouble with it is that they over-draw and exaggerate things." So it is a pretty hard job to pound these truths home and make people live up to them, but I hope you will keep on "pounding" and I'll do what little I can in that line. Another thing that people are very careless about is spitting in spite of all the cautioning and ordinances that have been formulated setting forth the dangers and filthiness of the practice. Right here in this town I have seen people spitting on the floor of the general store again and again, in fact, they spit almost anywhere over their chin and think it "doesn't matter." I wish if you have any posters or literature about spitting you would send me some and I will try to use them to advantage. I would like to inquire if that ordinance about the cleaning of glasses, dishes, etc., at Miami, was put into effect. I am sure this is something that is sadly overlooked by most people and especially at soda fountains and ice cream parlors, and that there must be a great deal of disease spread about through the unsanitary method of washing dishes. I would like to know if it is sanitary to use dish water and swill to fertilize flowers and plants in the yard, and to let the water from the kitchen sink drain out on the yard and there form an everlasting puddle. It seems to me this would attract and breed flies and mosquitoes. I believe this is a common practice especially in country places where they have no sewerage system. Will you kindly mail me any publications you may have on Sanitation, such as No. 153, 133, 168 and 99? Thanking you for your trouble and wishing you continued success in your effort for a cleaner and healthier Florida, I am,

Very truly yours,

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Dr. Joseph Y. Porter, State Health Officer, Jacksonville, Fla.

Dear Doctor: I notice in "Health Notes" for November that there is a state law regarding the proper screening of privies for school houses in

rural districts. It certainly is a good law, but I'm afraid it is very poorly observed. I have had occasion to notice the ones in this town and found that the entire back of the compartments were exposed to flies and public sightseers, and I presume there are plenty of other towns just as bad. I have heard it said that there was an extra large number of flies about this school house, and it certainly is a nice thing to have them traveling back and forth between these unsanitary privies and the things the children use in the school. I'd like to know if there is not a law requiring all privies (public and private) to be properly screened. Seems to me it is just as important that private ones should be as carefully looked after as any others, and I'll venture to say there is not half a dozen in this whole town that would comply with such a law, and I'm quite sure this town is very much like other small places. I believe it would be a good idea to have an inspector go through all the towns in Florida and post the names of the people who are not complying with such a law (if there is one) and after giving them a reasonable amount of time, fine the ones who do not do their duty. Much might be written and added to this little note concerning the great danger of spreading disease, etc., from such a condition of affairs, but what we need is more enforcement of the ordinances the legislature has made for the benefit of public health.

Yours very truly,

Observer.

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Jacksonville, Fla., Jan. 3, 1917.

Dear Sir: Upon my return to the city I find upon my desk your very excellent letter of December 22d, together with your second letter under date of the 28th. I wish to express to you my appreciation of your very complimentary remarks concerning the monthly publication of this Board, and I wish also to thank you for the very keen interest which you manifest in matters pertaining to the public health. With regard to the privy law, you are advised that the statutes require the construction and maintenance of fly-proof sanitary privies at all school buildings. Another statute requires fly-proof sanitary privies meeting with the approval of the State Board of Health in all incorporated municipalities. There is no state law governing the outbuildings of this nature, at private residences outside the limits of incorporated towns or cities. Your statement concerning the necessity for a more strict enforcement of existing laws is exactly in line with our ideas. Unfortunately, however, the statutes have made the State Board of Health strictly an advisory body, vesting in it no police or judiciary powers. For this reason the enforcement of state laws is within the jurisdiction of the regularly constituted prosecuting authorities in the various counties of the State, and we are dependent entirely upon the efficiency and cooperation of these authorities for the carrying out of the provisions of these very necessary and essential measures for the protection of the public health. Thanking you again for your interest in these matters, and assuring you of any assistance which this office may be able to render you at any time, I am,

Yours very truly,

(Signed) Joseph Y. Porter, State Health Officer.

## Press Comment

### TEACH CHILDREN HOW TO LIVE

At college I saw fortunes spent every autumn to teach football candidates how to elude opposing tackles, but not a cent to teach them how to elude tuberculosis, typhoid, pneumonia or cancer. We were required to dig out Latin roots and to unkink logarithmic gnarls, but there was not required a course in intelligent living.

There was a perennial, concerted, rock-ribbed, steel-girt conspiracy of silence against the human body. The educational system frowned upon bad taste in deportment, manners, language and literature, but bad taste in life itself was quite the proper thing. It was deemed more important to know quadratic equations than the simple fact that to sleep healthily in a room where the sunbeams never enter is as suicidal as a nibble of cyanide, albeit somewhat slower.

Long before New York's public school children of today learn how to decline "amo" they are taught to decline indiscriminate kisses. Long before they learn how Gettysburg was fought, they learn how fire is fought. The toothbrush drill precedes the first spelling drill. They learn the intelligent way to sneeze or cough. Long before they take up the avenues of Caesar's entrance into Gaul they are instructed in the avenue of entrance of regiments of bacilli into the human body. Gotham's tots learn the necessity of frequent airing of bedding, the proper cleaning of ice boxes, the curability of phthisis. No longer the pathetic spectacle of Alice in Blunderland. When Alice reaches the age of six and matriculates in New York's public schools she is now ushered at once into the wonderland of genuinely useful knowledge of her wisp of a body. And it begins to look as if the public schools of the future were to be a vast system of service stations on the highway of human life.—Newton A. Fuessle, in the Craftsman.—Fernandina News-Record.

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### RAT'S BOARD BILL IS \$1.82 A YEAR

According to the Federal Public Health Service, it costs \$1.82 to board a healthy rat a year, says the Minneapolis Journal. That is at the rate of half a cent a day. The rat is voracious and not over-particular about his food, taking the same wherever he can find it. The total annual board bill of the rat tribe in the United States must therefore be some hundreds of millions of dollars.

In return for this liberal expenditure in his behalf Monsieur Rat does nothing whatever that is useful, and much that is positively harmful. His worst disservice is playing host to the fleas that spread the bubonic plague, but he spreads other disease germs as well. From an economic standpoint he is a wastrel, and from a health standpoint a plague-carrier.

Boston is one of the few American cities that has an official rat catcher, but his activities must have been less efficient than those of the Pied Piper of Hamelin, for the Women's Municipal League has set afoot a vigorous campaign with "Starvation to Rats" as its slogan. The mayor has come for-

ward with a manifesto calculated to make ratdom tremble. The Transcript further explains that success can be attained only by general cooperation of householders, who must decline to board their rats any longer, and look to it that the unwanted rodents are exterminated.—New York Herald.

## **CANCER ON INCREASE, CENSUS BUREAU FINDS**

(International News Service)

Washington, Jan. 15.—The scourge of cancer in the United States is still growing, the Census Bureau announced yesterday. More females are its victims than males, and whites more subject to it than negroes, three-eighths of the deaths from cancer are caused by cancer of the stomach and liver. The statement says:

"The total deaths from cancer and other malignant tumors throughout the registration area (which contains approximately two-thirds of the total population of the United States) in 1914 numbered 52,420, corresponding to a death rate of 79.4 per 100,000 population. This figure represents an almost continuous increase—amounting to 26 per cent for the entire period—since 1900, when the rate was 63. How much of this increase has been due to more accurate diagnoses and greater care on the part of physicians in making reports to registration officials, and is thus apparent rather than real, it is impossible to estimate. For registration cities having 10,000 inhabitants or more in 1910 the rate averaged 88 per 100,000, but for smaller places and rural localities in the registration States it averaged only 69.6.

"Among the States, the lowest five rates—45.8, 46, 48.9, 51.5 and 57.8 per 100,000 population—are shown for Utah, Kentucky, Virginia, Montana and North Carolina, respectively; and the highest five—109.9, 107.6, 101.2, 100.8 and 97.1—for Vermont, Maine, Massachusetts, New Hampshire and California, respectively. (The rate for North Carolina relates only to places which had 1,000 or more inhabitants in 1910.)

"At least a part of the difference between the high and low rates is accounted for, first, by the fact that in some States the average age of the population is considerably greater than in others, cancer being of a malady much more likely to attack persons at advanced ages than those in the earlier periods of life, and, second, by the fact that in several of the States named there are considerable proportions of colored population, among whom the mortality from cancer is apparently lower than among the whites.

"The death rate for whites throughout the registration States was 80 per 100,000, as against only 56.2 for the colored population.

"The death rate from cancer among women, 96.8 per 100,000 was more than 50 per cent greater than the corresponding rate for men, 62.4."—Key West Citizen.

## **WEED CUTTING**

Every town and city in Kansas will be asked by the State Board of Health to pass a weed-cutting ordinance and make a campaign against weeds. The request is the first step in an anti-hay fever campaign which will be waged by Dr. Crumbine who says that hay fever can be avoided if weeds are cut down. Miami has somewhat of a reputation as a sure cure for hay fever, but a weed-cutting ordinance is always a worthy one.—Miami Metropolis.



## NOW IS THE TIME TO SWAT THE FLY AND MOSQUITO BEFORE SPRING

(Gainesville Sun)

While the flies are out of the stable let's close the door. Fly traps and swatters are useful to help rid us of the flies we already have, but when we can prevent such a large number of them from being hatched we can readily see that our task of killing those in the future will not be so discouraging. We can prevent most of the flies from breeding by complying with those Health Rules which specify that all stable manure, night soil, dead animals, and wet garbage shall be either screened, burned or buried. All stable manure shall be collected from the stalls or lots, at least once each day and placed in a bin or pit which is securely screened or otherwise thoroughly protected against the possibility of flies getting in or out. Night soil is protected by a fly-proof closet, until it is collected by the city scavenger, who immediately carries it in a tight tank to the incinerator where it is burned as are dead animals, which are carted there by separate conveyance. Garbage of the wet variety, such as fish and chicken "trimmings" will breed flies very quickly and all such kitchen refuse should be placed in tight metallic garbage pails with tight fitting covers, immediately, from which cans such refuse is collected either by the city trash wagons or by persons holding permits to collect such matter, from the Health Department. These permits specify the manner in which this matter shall be collected and we also pass upon the disposal of same. Consequently you see that if we get the right kind of support and co-operation, we ought to keep the flies under control.

As to the mosquitoes, we are positive that they can breed only in stagnant pools of water, and therefore we turn our attention to the drainage of all such pools or when this is not practical, the oiling of such pools, with kerosene about twice a month during warm weather. I am confident that mosquitoes have been propagating during the past two weeks, as I have heard them at night buzzing around, and therefore I think that it is a good idea to oil these ponds during the warm winter weeks.

Now is the time to give the carpenters a job at screening your house. Remember, that when you have screened your home you have done the most practical thing towards keeping malarial fever, typhoid fever, tuberculosis and many forms of intestinal diseases out of your family.

Remember then that the interest on your investment of say \$200 for screening will probably be several times the principal in money saved, to say nothing of the possibility of saving your life or that of your child, and the comfort in being able to eat and sleep without the botheration of the flies in the food, and mosquito bills in the flesh, is worth the price.

**FINAL WORD**—Screen the manure pile, screen the home and you screen out the largest monsters of disease and death. Destroy or oil the stagnant pools.

City Health Officer.

## MR. HOUSEFLY, WHOLESALE DEALER IN GERMS OF DISEASE AND DEATH

(Gainesville Sun)

Mr. Housefly—wholesale dealer in germs causing disease and death:

I come to your doors and windows this spring with a complete line of all disease germs commonly known to be carried and distributed by my firm. I sincerely trust that you will be considerate enough to not block my entrance into your home with those pesty screens, and that you will also continue dumping your garbage and manure in the open that I may be able to house Mrs. Fly and the many poor little flies whose very existence in your town depends upon plenty of nice rotten garbage and manure, that they may be hatched and raised to the sublime state of adult flies, and go out for themselves as traveling representatives of this firm to visit your neighbors and supply them with disease and death. You must remember that it is only the dead and decayed state of animal and vegetable life that concerns us in enlarging our business and increasing our armies.

My firm has for distribution this spring the very choicest line of "Consumption" germs which we bring directly from the spittoons of our best patients or manufacturers, and deliver in your bedroom (if it is not screened) directly to your babies' mouths. I also have an excellent line of typhoid germs, which I picked up on my feet in the back yard of a patient, who, by-the-way, was screened but who was nice enough to our firm to allow the "bowel-discharge" to be thrown in this back yard. I guarantee these to be perfectly fresh and free from any effects of a disinfectant. I will deliver these to your dining table and on the knives and forks and the only charge will be "a little sip of the babies' milk" and here I will manage to leave a few germs especially for the baby.

I am very sorry to again have to state to my customers that it is impossible for me to supply them with malaria germs, but I will state for my fellow colleague, "Mr. Mosquito," that he will be around on time and will carefully inoculate all who live in unscreened houses, with this exceedingly popular germ. I will state for the mosquito, also, that in order that he get to the members of your family you should by all means never screen your windows and doors.

I would like to announce that should my customers prefer some other germs than typhoid, tuberculosis (consumption) or malaria fever, I shall be glad to supply them with cholera, diarrhoea, dysentery, or a mixture of germs which I do not guarantee as to the kinds, but I have reason to believe that among them can be found scarlet fever, measles, and many other contagious and infectious diseases which the doctors have not been able to diagnose by isolating any certain germ. I am certain that most of these diseases last mentioned are in the homes which have not been so selfish to our firm as to screen. Now, a few words concerning the methods employed by us in carrying these germs. We light upon the spittoons, bowel discharges, etc., and eat all we want and more than we can retain and we are careful to get our feet well covered with it, then we fly out the doors or windows, and down the street to the next house where we go in the unscreened doors or windows, and light in the milk or on the food; we also regurgitate the food eaten at the other house.

As I have said before I will be around early this spring and when I find a house unscreened, or manure piles unscreened or otherwise unprotected, or the garbage in open boxes, etc., I shall take it for granted that I and my family are welcome, and I shall leave you plenty of the above named germs, and **MAKE MYSELF AT HOME.**

Yours very truly,

MR. HOUSEFLY,  
Special Representative Disease Germs.

By City Health Officer.

## COUNCIL GETTING WISE HABITS OF SANITATION

If we were offered the choice of riches and ill health or poverty and good health, we would not stop to take the matter under consideration, but would choose the latter and think we had made a good trade.

It seems that the city council is rather of that belief. They are wise to many things, and at the present time they are wise to the fact that there are some privies in this town that surely ought to come out, and while there is just such a one standing in the back yard of this office, we are with the council and condemn all of them, including this one. We are not responsible for it being there, but it is there, and so far our neighbors have not offered any complaint, but it has no business there and we say to the council, get busy, "safety first," and in this case safety means health.

SO—

The council discussed the matter and Dr. F. C. Keisling, city health officer, was there and told the council of the importance of attending to this matter and as a result that body passed a resolution that letters should be written to those having service toilets requesting that they do away with them and put in septic tanks. That is a good suggestion, and it is more than likely that an ordinance will be passed along this line pretty soon, and as far as we are concerned the council cannot make this ordinance too severe.

The health of Sebring is the paramount issue. We are blessed with the finest climate in the world. It is up to us not to pollute same, and therefore let every citizen take this matter up and attend to his or her own sanitary condition so that should the council decide to pass an ordinance that it will have already been obeyed. The move is certainly a good one, and has the hearty approval of the White Way, and we are ready to help push it along.—Sebring White Way.

## Veterinary Notes

### THE GREAT AMERICAN HOG

(By Dr. Chas. F. Dawson, Veterinarian State Board of Health of Florida)

The hog is one of the most valuable animals to the farmer because he is prolific, matures early, is palatable, sells readily for cash and is a mortgage lifter.

For these reasons more money is being spent on the hog, today, by governments, than any other animal. Yet we veterinary students must admit that we know less about the ailments of hogs than any other domestic animal, and we are up against it to a large extent, when called to treat a hog.

Millions of dollars are being spent by governments and by private enterprises on hog cholera; yet we do not even know the cause of this disease. We have found the perfect remedy, in serum, yet we know nothing of the cause of hog cholera. Our knowledge upon the subject is empirical.

Our knowledge upon the origin of the hog as we know him today is about as vague. Dr. F. D. Coburn is quoted in regard to the origin of the hogs and hog breeds as follows: "The domestic hog is supposed to be a descendant of the wild boar of Europe, North Africa and Asia Minor. The chief seat of the world's swine rearing industry is the more northerly States of the Mississippi valley, where favoring conditions of soil and climate encourage production of an enormous quantity of corn, which is chiefly relied on to feed swine during both their growing and fattening periods.

In the United States, swine, when very young, are designated as pigs, when partly grown as shoters, and later as hogs.

Prior to 1850 swine had little uniformity except that they were white and slow in maturing; there were innumerable varying breeds, each a favorite in some county or section of a State, and those growing to the largest size were esteemed best, regardless of excessive offal or cost of production.

At present nine-tenths of the hogs in the United States are black, with small markings of white on the face, feet and tail, and sometimes elsewhere. These are of the Poland-China and Berkshire breed, or a mixture of the two; the next most prominent breed is the Chester White. Other breeds, equally distinct, but reared in limited numbers, are the Essex, black; Duroc-Jersey or Jersey, red, sandy, or reddish; Victoria and Suffolk or Small Yorkshire, white.

The Essex and Yorkshires are from England, the Duroc-Jerseys are of uncertain origin, and the Victorias originated since 1860 in Indiana. The predominant breed, the Poland-China, originated in Butler and Warren Counties, Ohio, between 1838 and 1840 in the crossing of various families there known as Big China, Russia, Byfield, Bedford and Irish Grazier, and the offspring was a large black and white spotted kind called by many names, from which a national convention of swine-breeders in 1872 selected that of Poland-China. These were crossed with imported Berkshires to give refinement and propensity to earlier fattening, and incidentally they acquired the Berkshire's black color and white markings. The Berkshire



in its improved form originated (as did the Essex) in England—Italian and Spanish swine being crossed with coarser native stock—between 1780 and 1800, but although first introduced into North America about 1830 it did not obtain general favor until 1870-80. Chester Whites are the result of mating some large white stock from Bedfordshire, England, with the white hogs common in Chester County, Pennsylvania, about 1818-30; the descendants being swine that gradually improved by selection, and have maintained their popularity in North America better than any other of their color.

Hogs of a dark color are most largely reared because of a belief that they are hardier and less susceptible to affections of the skin incident to sudden changes of temperature and the muddy quarters, severe winds, and burning suns to which they are too often continuously subjected.

Poland-China, Berkshires, Chester Whites, and Duroc-Jerseys are classed as large breeds, weighing, when properly reared, from 300 to 450 pounds at twelve months, and from 500 to 600 and even more at eighteen months, and they have been bred to a degree of fineness in bone, smallness of offal, compactness of form, and early maturity which makes them well-nigh perfect. Essex, Victorias, and Suffolks or Small Yorkshires are termed small breeds, and, although of excellent quality, do not grow to such weights as others, and mature more quickly.

### ENZOOTIC PNEUMONIA IN YOUNG PIGS

One of the most important diseases in young pigs is an infectious pneumonia. It may occur in a mild form in which the loss is small, or it may occur as an epidemic or enzootic and carry off whole litters. While it occurs in the first few weeks of life, as a rule, it may attack pigs that are several months old. The same disease attacks young calves and lambs, but rarely young colts. Although it is an infectious disease, certain conditions predispose to its onset. These are exposure to cold and dampness, improper feeding, and inbreeding. The younger pigs may die in a few days of the acute form of the disease, while in older pigs the chronic form is seen and recovery may occur, or the animal die of a lingering sickness.

Medical treatment is usually useless. There is reason to believe a bacterin or bacterial vaccine may be used with success in immunizing the well pigs. This vaccine is made by isolating, by cultural methods, the causative germs from the lungs, heating these germs for about an hour at 60 degrees centigrade to kill them. These dead germs are injected under the skin three different times each ten days apart, in varying doses.

Other things to do, are to separate the sick from the well, bury or burn all carcasses, provide warm, dry pens and good food.

### TAPEWORM DISEASE IN THE LIVER OF SWINE

Five species of tapeworms are commonly found in the intestinal tract of dogs. One of these, the *Taenia marginata*, is of importance to the hog industry because part of its developmental stage is passed in the liver of hogs, where it sets up inflammation, and causes great loss in young pigs. One outbreak of this disease was found near Gainesville a few months ago.

The adult worm in the bowel of the dog is constantly throwing off segments of its body. These contain eggs and pass out of the dog and are swallowed by the hog along with feed and drink. In the hog's stomach the eggshell is digested and the embryo is liberated. The embryos, on reaching the intestine, penetrate the wall of the intestine and enter the portal veins, by which they are carried to the liver. They are sometimes carried to other organs. After lodging in a small liver vein they bore their way out to the surface of the liver, leaving tracks of their work.

They sometimes bore all the way through the capsule of the liver and drop out into the peritoneum causing peritonitis. When the invasion is heavy acute inflammation of the liver is brought about and in many cases fatal hemorrhage from the liver, with sudden death, occurs. When they are carried along the veins to the lungs, broncho-pneumonia and even pleurisy, occur.

In young pigs the course of the disease is limited to a few days sickness; with symptoms of depression, staggering gait and dullness. Death is sudden. In other cases the pigs may live several weeks until there is marked anaemia and debility.

As the dog is the source of the trouble, this animal should be treated regularly two or three times a year, for tapeworms, or dogs, and especially sheep dogs, should be kept away from the hogs.

### **TUBERCULOSIS IN SWINE**

This is one of the most important swine diseases now existing in the United States, being second in importance to hog cholera. However, it does not prevail in Florida, because our cattle do not, as a rule, have tuberculosis.

There is no animal next to the cow that contracts tuberculosis as easily as the hog, and in all cases, where we find the tuberculous dairy-cow we may expect to find the same disease in any hog that lives with her. Tuberculosis in swine is very prevalent in the great dairy states where the cattle are extensively infected with the disease.

### **VERMINOUS BRONCHITIS AND PNEUMONIA**

A really important disease of the lungs in young swine is an inflammation of the lung tissue due to the presence of the lung worm *Strongylus paradoxus*.

When these worms become numerous they block up the air tubes and cause collapse and inflammation of that part of the lung supplied with air by the tubes in which the worms are located. If a considerable lung area is affected we have embarrassed breathing to which name "panting" has been applied. In extreme infestation pneumonia develops, resulting in the death of the pig.

As aids in determining the lung-worm disease, a general statement may be made that hog cholera kills hogs of all ages, while lung worms are found causing sickness and death in swine up to about three months of age. If necessary, a pig should be killed to determine the presence of these worms. Remove the heart and lungs, wash them free of blood and look for bright or pale-red spots at about two inches from the edges of the largest lobes of the lungs. When the worms are very plentiful the affected areas of the lungs may be much larger. They have somewhat the color of the meat of a young calf. Cut through these parts of the lungs and press upon them and you will be rewarded by finding the small, thread-like worms protruding from air tubes which have been cut across. They vary greatly in size, according to age, from two inches long, down to sizes when they can hardly be seen. When you find this condition existing, do not treat for hog cholera, as your work will be useless. Of course, lung-worm disease and hog cholera co-exist. If both diseases exist, as shown by the examination of a sick pig that has been killed, or of one that has been found dead, treat for hog cholera and advise the owner to give special attention to the small animals by furnishing them with good feed, and making the animals inhale daily the smoke from burning leather, feathers or rags, or the fumes from tar, creolin or sheep-dip generated by pouring these substances upon hot iron or bricks. As the disease is kept going by pigs remaining on soil they have infected by coughing up the worms and their eggs, it is wise to change their living places frequently, and also the drinking water.

If the pigs have to be kept in a small enclosure, such as a pen, shovel out the earth for about six inches and refill with fresh earth, every week or so. Scald out the troughs and white-wash the wood work. The following mixture may be poured down each nostril every third day, for three treatments: Take equal parts of olive oil and spirits of turpentine, shake well, and pour down each nostril a half teaspoonful. Hold up the head till the animal swallows or coughs.

Attention to these details will tide the animal over to a size where the worms can be thrown off.

## Summary of Public Health Administration, December

### WEST COAST DISTRICT

Tampa: Routine work, office of Assistant to the State Health Officer. Differential diagnosis scarlet fever (3).

West Tampa: Differential diagnosis scarlet fever. Investigation of tuberculosis.

### WESTERN DISTRICT

Pensacola: Routine work office of Assistant to the State Health Officer. Management of communicable diseases and supervision of inspections of sanitary patrolman as follows: Screening Law—meat shops 3, grocery stores 4, fruit stands 10. Surface Closet Law—private residences 19. Abate-ments ordered where violations of law found. Communicable Diseases—tuberculosis 3, measles 1, scarlet fever 2, diphtheria 1, fumigations; releases, etc., 7.

### SOUTH EAST COAST DISTRICT

Key West: Routine work office of Assistant to the State Health Officer. Diagnosis case leprosy. Nine vaccinations against smallpox performed. Routine laboratory work.

### SOUTH CENTRAL DISTRICT

Plant City: Routine correspondence, office of Assistant to the State Health Officer. Inspection of places handling foods. Collection of water for analysis. Investigation of rumors of contagious disease. Visit case of dysentery with attending physician; consultation with dairymen.

Trilby, Riverland: Investigation two reported cases infantile paralysis; physical examination cases collection data inspection premises.

Youmans, Midway, Turkey Creek, Dover, Hopewell, Cork Academy, Knights: Assistance to Medical Inspector with examination of school children.

Sydney: Visit case of diphtheria with attending physician.

Punta Gorda: Investigation case dysentery and typhoid fever. Consultation with physicians. Visit of cases and collection of specimens. Sanitary inspection of food supplies with mayor.

Tampa: Consultation with bacteriologist and submission of specimens for examination.

Lakeland: Weekly visits; consultations with city health officer and routine duties.

### CENTRAL DISTRICT

Ocala: Routine work, office of Assistant to the State Health Officer. Examination of school children in company with city physician. Inspection of fruit stands for enforcement of screening law. Inspection of new septic tank; found to afford breeding place for mosquitoes; recommendations made.

### NORTH CENTRAL DISTRICT

Live Oak: Routine work, office of Assistant to the State Health Officer. Microscopical examination of specimens for local physicians. Consultation with city council regarding septic tank, complained of as nuisance; abatement. Meeting with County Board of Education. Assistance to local registrar of vital statistics in starting his work. Acting city health officer during absence of that officer. Inspection of drainage of Live Oak. Inspection of fruit stands, grocery stores, etc.

## NORTH EAST COAST DISTRICT

St. Augustine: Routine work, office of Assistant to the State Health Officer.

Hastings, Federal Point, Bunnell, Daytona, Daytona Beach, Seabreeze, Ormond, Holly Hill, Port Orange, New Smyrna, Hawk's Park, Titusville, Eau Gallie, Melbourne, Cocoa, Lake Helen, Orange City, DeLand, Pomona, Crescent City, Palatka, South Jacksonville, Interlachen, Welaka, Sisco, San Mateo, East Palatka: Sanitary inspections, investigation health conditions, conferences with authorities on public health matters.

## WEST COAST DISTRICT

Tallahassee: Routine work, office of Assistant to the State Health Officer.

## EDUCATIONAL HEALTH EXHIBIT TRAIN

Towns visited during December: Holts, Milligan, Crestview, Mossy Head, DeFuniak Springs, Argyle, Ponce de Leon, Westville, Caryville, Bonifay, Chipley, Cottondale, Marianna, Cypress, Grand Ridge, Sneads, River Junction, Apalachicola, Hosford. Total number of towns visited in 1916..... 145

## PUBLICITY AND PUBLICATIONS

Monthly bulletin "Health Notes," Vol. XI, No. 12, December, 1916, pp. 28. Press Service bulletins to Florida newspapers: Dec. 6, "How Diseases are 'Caught,'" Dec. 13, "Causes of Death," Dec. 27, "Dollar Blindness." Publications out in December: none.

## DISTRIBUTION OF LITERATURE DURING DECEMBER

Mailed upon request and distributed in field.....	4,251
Press service bulletins to Florida newspapers, 3 issues.....	825
Health Notes, December, mailing list.....	10,550
Total number pieces distributed.....	15,626
Number pieces literature distributed in the year 1916.....	204,415



## SMALLPOX

Reported cases of smallpox in Florida, December:

Marianna, Jackson County..... 1  
 West Palm Beach (on dredge), Palm Beach County..... 1

Total number cases reported during December..... 2  
 Number cases reported in Florida during 1916..... 90

## DISTRICT TUBERCULOSIS INSPECTION

Monthly Report, Status of Tuberculosis District Nursing, Six Months Ended Dec. 31, 1916

District	Total Number Patients under Instruction July 1, 1916	New Cases Found	Cases Found to Have Died	Cases Removed	Cases Apparently Cured	Total Number of Patients in District Under Instruction Dec. 31, 1916	Total Number Patients Following Instruction
District No. 1†.....	68	37	27	11	3	64	51
District No. 2**.....	43	9	4	...	...	48	25
District No. 3.....	122	72	14	14	13	153	91
District No. 4.....	84	46	19	27	10	74	64
District No. 5.....	138	56	20	16	5	153	98
District No. 6.....	164	89	15	14	8	216	168
District No. 7.....	64	62	42	23	9	52	*
District No. 8.....	29	126	15	12	13	115	60
District No. 9.....	134	61	16	11	4	164	164
District No. 10.....	136	61	26	40	3	128	81
District No. 11.....	66	94	25	22	6	107	74
District No. 12***.....	149	103	34	18	10	190	*
Colored Nurse, State at large		176	16	8	6	146	146
Total.....	1,197	992	273	216	90	1,610	1,006

\* Not reported.

\*\* Nurse in charge of this district on special service Jacksonville account poliomyelitis July, August and September.

\*\*\* Nurse in charge of this district on special service Jacksonville account poliomyelitis July, August and September. Both districts 9 and 12 covered for these months by nurse in charge of District No. 9.

† Nurse in charge of this district on special service Flomaton, account poliomyelitis July August and September.

## BIOLOGICAL PRODUCTS

Distribution of Biological Products during December (anti-rabic vaccine, anti-typhoid vaccine, diphtheria and tetanus antitoxin free to indigent only.)  
Number of persons receiving treatment

County and Town	Anti-Smallpox Vaccine	Anti-Rabic Vaccine	Anti-Typhoid Vaccine	Diphtheria Antitoxin Curative and Immunizing	Tetanus Antitoxin Immunizing
BREVARD					
Cocoa .....	10	..	..	..	..
Titusville .....	..	2	..	..	..
COLUMBIA					
Lake City .....	20	..	..	..	..
DADE					
Fort Lauderdale .....	20	..	..	..	..
DUVAL					
Jacksonville .....	61	2	2	37	5
FRANKLIN					
Apalachicola .....	20	..	..	..	..
GADSDEN					
Chattahoochee .....	30	..	..	..	..
Greensboro .....	..	..	..	16	..
JACKSON					
Marianna .....	40	..	..	..	..
MONROE					
Key West .....	..	..	..	1	3
OKALOOSA					
Holt .....	..	2	..	..	..
PALM BEACH					
West Palm Beach.....	40	..	..	..	..
ST. JOHNS					
St. Augustine .....	300	..	..	..	..
ST. LUCIE					
Fort Pierce .....	20	..	..	..	..
TAYLOR					
Perry .....	..	1	..	..	..
VOLUSIA					
Daytona .....	20	..	..	..	..
New Smyrna .....	50	..	..	..	..
Total.....	631	7	2	54	8

Total number persons receiving anti-smallpox vaccine in 1916.....6,138  
 Total number persons receiving Pasteur treatment in 1916.....57  
 Total number persons receiving anti-typhoid vaccine in 1916.....1,046  
 Total number persons receiving diphtheria antitoxin in 1916.....299  
 Total number persons receiving tetanus antitoxin in 1916.....33

## CRIPPLED CHILDREN

NAMES								Operating Plaster Work Special Treatment, Etc.	Date Discharged and Condition	Diagnosis	Under Treatment 1-1-17
	In St. Lukes 12-1-16	In Brewster (Col.) 12-1-16	Outside Treatment	Applications Received	Admitted St. Lukes	Admitted Brewster	Admitted for Office Treatment				
C. B.	1	..	..	..	..	..	..	1 Op. Tonsils & Aden.	..	Ischemic Myositis	1
G. G.	1	..	..	..	..	..	..	1 Casts 2nd and 28th	..	Club foot.....	1
O. D.	1	..	..	..	..	..	..	1 Bismuth paste treatment	..	T. B. Kidney (?)	1
H. M.	1	..	..	..	..	..	..	1 Dressings	..	T. B. Hip and Sacrum	1
F. P.	1	..	..	..	..	..	..	1 Dressings	..	T. B. Hip.....	1
I. P.	1	..	..	..	..	..	..	1 Dressings, cast 4th	..	Osteomyelitis tibia	1
A. T.	1	..	..	..	..	..	..	1 Dressings	..	Osteomyelitis tibia	1
R. W.	1	..	..	..	..	..	..	1 Massage treatment	..	Paraplegia	1
W. H.	..	..	1	28	..	..	..	1 Exam.	..	Muscular	1
W. L.	..	..	1	12	..	..	..	1 Dressings and X-Ray Exam	..	Dystrophy	1
C. P.	..	..	1	28	..	..	..	1 Dressings and X-Ray Exam	..	Chr. Osteomyelitis tarsus	1
	..	..	..	..	..	..	..	..	..	T. B. Spine with dorsal kyphosis and T. B. Hip	1
Total	8	..	3	3	..	..	..	11	..	..	11

## BACTERIOLOGICAL LABORATORIES

## SPECIMEN EXAMINATION

	Jacksonville	Tampa	Pensacola	Key West	Miami	Tallahassee	Total
Animal Parasites.....	173	82	36	3	5	12	311
Diphtheria .....	306	100	32	..	11	16	465
Gonorrhoea .....	82	42	101	1	10	6	242
Malaria .....	152	106	30	1	13	22	324
Pathological Ex. ....	..	8	..	..	12	..	20
Rabies .....	8	..	2	..	..	1	11
Tuberculosis .....	135	42	34	1	38	12	272
Typhoid .....	141	84	25	..	7	11	268
Water: Bacterial.....	2	..	..	..	14	..	16
Wassermann .....	390	77	..	..	..	..	467
Miscellaneous .....	26	67	9	8	35	29	174
	1,415	608	269	14	145	109	2,560

Total number of specimens examined in the Laboratories of the State Board of Health during December, 1916.....2,560

DISTRIBUTION OF DISEASES DETERMINED BY BACTERIOLOGICAL  
LABORATORIES DECEMBER, 1916

—MALARIA—

TOWN	Diphtheria	Gonorrhea	Etiocautummal	Quartan	Tertian	Species not Determined	Typhoid	Tuberculosis	Uncinaria	Ascaris	Trichiuris	Strongyloides	Rabies	Wassermann	Leprosy
Alton							2								
Apalachicola	1														
Avon Park									1						
Bartow								2							
Buena Vista								2							
Branford								1	1						
Brewster								1							
Brooksville		1													
Bushnell	1														
Bradentown								1							
Century							1								
Chattahoochee													1	25	
Clearwater		2	1			1	1								
Coleman							1								
Deer Park			1												
DeFuniak Springs							1		1						
Delray	1														
" Release C.	1														
Ft. Meade									1						
Ft. Myers									1					1	
Ft. Pierce							2	1	1						
Gainesville	1	1					1	1	2						
" Release C.	1														
Jacksonville	15	19	2		3		11	18	17	3	1		1	89	
" Release C.	23														
Jasper							3								
Holt													1		
Key West		1						1						2	1
Kissimmee	2													1	
Lake Butler							1								
Lakeland														1	
Lake Worth		1													
Live Oak		1													
Longwood									2						
McAlpine									4						
Madison			1						2						
Mandarin									2						
Marianna								1							
Mayo									1						
Miami		3					2	2							
Micanopy									1						
Milton	1	1													
Monticello	3														
Mt. Dora									1						
Mulberry														1	
Newberry									1						
New Smyrna									1						
Nocatee								2							
Ocala							1								
Orlando		1				1			3						
Palatka															
Pensacola	4	30	1		1			6	8						2
Perry					1					1					
Plant City	4		3			1									
Pine Barren	1	1							2						
Pompano									1						
Port St. Joe	1														
Punta Gorda							2								
Quincy								1							
River Junction							1								
St. Augustine		1						1							
St. Petersburg								1	8	1	1				
San Antonio									1						
Sanford							1							1	
Sarasota									1						
Sebring	1														
Tallahassee		2	1		2				2						
Tampa	14	10				6	7	9	3	2				18	
Tarpon Springs								1							



## MALARIA

TOWN	Diphtheria	Gonorrhoea	Estivoautumnal	Quartan	Tertian	Species not Determined	Typhoid	Tuberculosis	Uncinaria	Ascaris	Trichiuris	Strongyloides	Rabies	Wassermann	Leprosy
Titusville .....	..	6	..	..	..	..	..	1	1	..	..	..	..	..	..
Vernon .....	..	..	..	..	..	1	..	3	..	..	..	..	1	..	..
West Palm Beach.....	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..
White Springs .....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Wildwood .....	..	..	..	..	..	..	1	..	4	..	..	..	..	..	..
Williston .....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Winter Haven .....	..	..	..	..	..	..	..	1	3	..	..	..	..	..	..
Zolfo .....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total.....	75	81	10	..	7	10	41	59	78	7	2	1	5	146	1



# HEALTH NOTES

OFFICIAL BULLETIN

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## STATE BOARD OF HEALTH

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No. 2 (New Series)

HON. FRANK J. FEARNSIDE, President  
Palatka, Fla.

HON. S. R. MALLORY KENNEDY, M. D.  
Pensacola, Fla.

HON. C. G. MEMMINGER  
Lakeland, Fla.

EDITED BY  
JOSEPH Y. PORTER, M. D., Secretary and State Health Officer

EXECUTIVE OFFICE  
State Board of Health Building, Springfield Boulevard  
Jacksonville

BRANCH OFFICES  
ASSISTANTS TO THE STATE HEALTH OFFICER  
Tampa Key West St. Augustine  
Pensacola Gainesville Ocala

AGENTS  
Miami Fernandina Palatka

BACTERIOLOGICAL LABORATORIES  
CENTRAL LABORATORY  
Jacksonville  
BRANCH LABORATORIES  
Tampa Pensacola Miami  
Tallahassee Key West

This Bulletin will be sent to any address in the State free of charge.

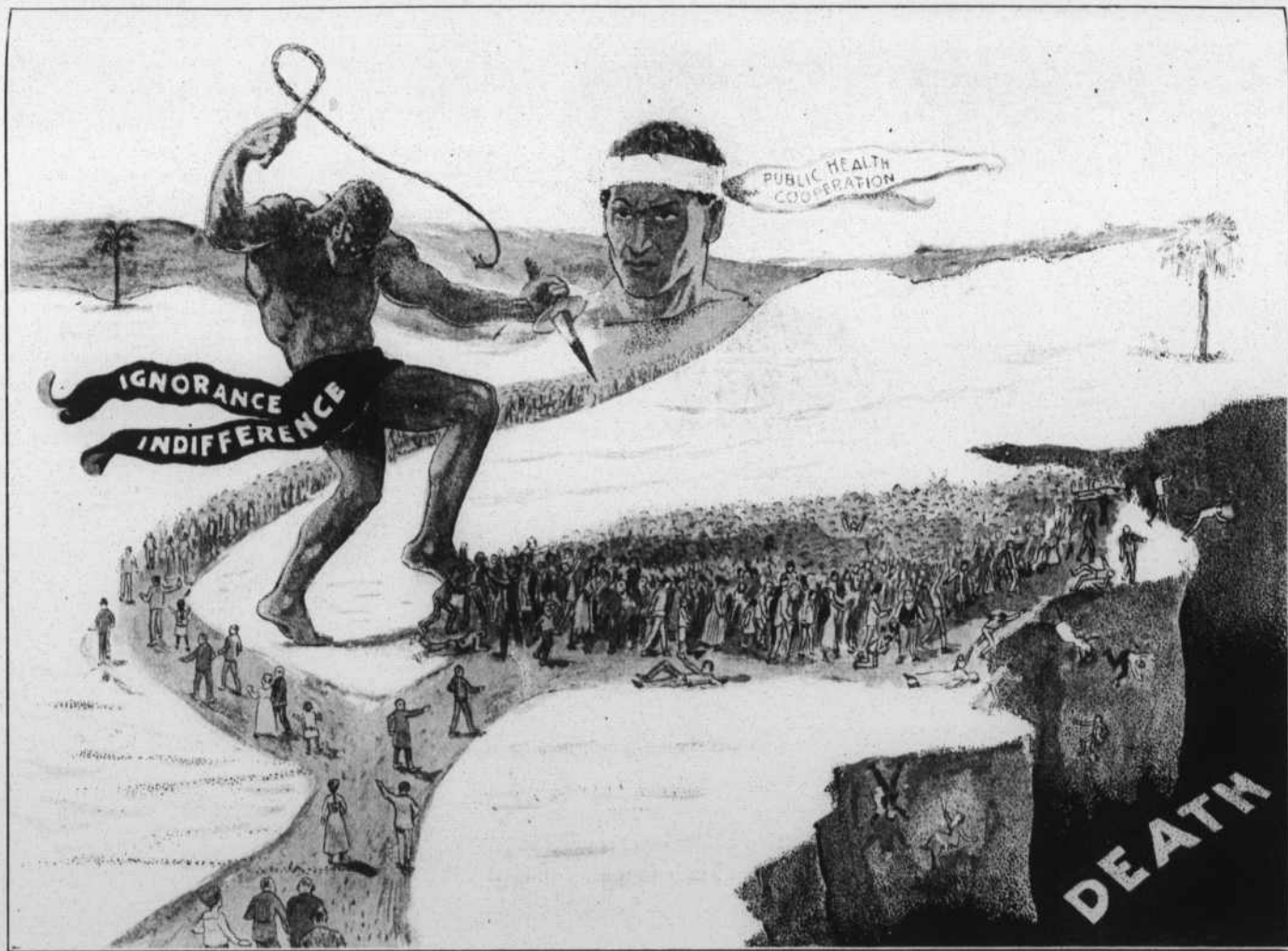
In case of outbreaks of smallpox, typhoid fever, diphtheria, scarlet fever, or any contagious disease, report to the State Health Officer, Jacksonville, and, if necessary, a medical officer will be detailed to take charge.

If you wish to know how to avoid tuberculosis, typhoid fever, malaria, hookworm, smallpox, diphtheria, etc., address the State Health Officer, Jacksonville.

If you think you have tuberculosis, typhoid fever, malaria, hookworm, or diphtheria, have your doctor take a specimen and send to one of the State Board of Health laboratories for examination.

Anything you want to know about sanitation and public health the Executive Office will try to tell you.

Should you have contagious diseases among your live stock, write to the State Health Officer for advice and help.



Drawn for Florida Health Notes by Chas. Van Osten, 1916

# LIST OF STATE BOARD OF HEALTH PUBLICATIONS FOR FREE DISTRIBUTION

- Poster 58, From Flies and Filth to Food and Fever, 1908, Third Edition, 12"x23"  
 Poster 67, The Evolution of Consumption, August, 1913, Second Edition, 22"x30"  
 Publication 77, The House Fly, Second Edition, May, 1914, pp. 11.  
 Publication 82, Twenty-Second Annual Report of the State Board of Health of Florida, 1910, pp. 171.  
 Publication 86, Prevention of Ophthalmia Neonatorum, 1911, pp. 3.  
 Poster 90, Smallpox Vaccination, April, 1912, 18"x24"  
 Publication 92, Rules and Regulations of the State Board of Health and Public Health Statutes, with Supplements, March, 1912, pp. 77.  
 Publication 93, Twenty-Third Annual Report of the State Board of Health of Florida, 1911, March, 1912, pp. 372.  
 Publication 99, Sewage Disposal for Rural Homes, Revised, Second Edition, August, 1914, pp. 10.  
 Publication 100, Twenty-Fourth Annual Report of State Board of Health of Florida, 1912, February, 1913, pp. 232.  
 Publication 103, Cattle Tick Eradication, Reprint from the 24th Annual Report of the State Board of Health of Florida, March, 1913, pp. 54.  
 Publication 105, Malaria, April, 1913, pp. 8.  
 Publication 106, Mosquitoes, May, 1913, pp. 16.  
 Publication 108, Diphtheria, March, 1914, pp. 4.  
 Publication 109, Measles, March, 1914, pp. 4.  
 Publication 110, Scarlet Fever, March, 1914, pp. 4.  
 Publication 111, Smallpox, March, 1914, pp. 4.  
 Publication 112, Twenty-Fifth Annual Report of the State Board of Health of Florida, 1913, March, 1914, pp. 293.  
 Publication 117, Imhoff Tanks, May, 1914, pp. 6.  
 Publication 118, Hookworm Disease and Soil Pollution, May, 1914, pp. 13.  
 Publication 119, Consumption Leaflet, June, 1914.  
 Publication 120, Rules and Regulations for the Importation of Domestic Animals into Florida, August, 1914, pp. 4 (Supplement to Publication 92).  
 Publication 122, Common Sense in Contagion, October, 1914, pp. 8.  
 Publication 123, Smallpox, December, 1914, illustrated, pp. 44.  
 Publication 124, The House Fly, Carrier of Disease, December, 1914, illustrated, pp. 16.  
 Publication 125, Baby Welfare, December, 1914, illustrated, pp. 17.  
 Publication 126, Typhoid Fever, December, 1914, illustrated, pp. 23.  
 Publication 127, Hookworm Disease, December, 1914, illustrated, pp. 30.  
 Publication 128, Pure Water, December, 1914, illustrated, pp. 21.  
 Publication 129, Tuberculosis, Its Cause, Prevention and Treatment, December, 1914, illustrated, pp. 18.  
 Poster 130, Hookworm, December, 1914, 12"x25"  
 Publication 131, The Serum Treatment of Hog Cholera by the "Single" and "Double" Methods, December, 1914, pp. 13.  
 Poster 132, The Barn That Jack Built, Sanitary Poster, December, 1914, 15"x25"  
 Publication 133, General Sanitary Management, December, 1914.  
 Publication 134, Twenty-sixth Annual Report of the State Board of Health of Florida, 1914, pp. 247.  
 Publication 135, Hookworms in Dogs, pp. 4, Reprint from Vol. IX, No. 10, October, 1914, Health Notes.  
 Poster 136, Rats, 11"x20"  
 Publication 139, Notice of Quarantine, Dade County, May, 1915, pp. 4.  
 Publication 140, Rules and Regulations, Cattle Tick Eradication, Florida, May, 1915, pp. 6.  
 Publication 141, Hookworm, leaflet, June, 1915.  
 Publication 142, A Few Remarks on Preventive Medicine, July, 1915, pp. 16.  
 Publication 143, Flies, July, 1915, pp. 4.  
 Publication 144, Chemical Treatment of Water, July, 1915, pp. 7.  
 Publication 145, Typhoid, July, 1915, leaflet.  
 Publication 146, Pellagra, July, 1915, leaflet.  
 Publication 147, The Sanitary Privy, July, 1915, leaflet.  
 Publication 148, Whooping Cough, July, 1915, leaflet.  
 Publication 149, Flies, July, 1915, leaflet.  
 Publication 150, Malaria, July, 1915, leaflet.  
 Publication 151, Measles, August, 1915, pp. 18.  
 Publication 152, Save the Babies, October, 1915, pp. 19.  
 Publication 153, Home Sanitation, January, 1915, pp. 20.  
 Publication 155, Demonstration Train of the State Board of Health, January, 1915, folder.  
 Publication 157, How to Test Cattle for Tuberculosis, April, 1916, pp. 8.  
 Publication 158, Malaria, April, 1916, pp. 4.  
 Publication 159, Some Poultry Pests, April, 1916, pp. 10.  
 Publication 160, Annual Report State Board of Health of Florida, April, 1916, pp. 256.  
 Publication 161, A Model Sewage Disposal Plant for a Rural Dwelling, Reprint Vol. XI, No. 3, March, 1916 Health Notes, pp. 6 (illustrated).  
 Publication 162, Tick Eradication, Reprint Vol. XI, No. 3, March, 1916, Health Notes, pp. 14.  
 Publication 163, Hog Cholera, pp. 30.  
 Publication 164, Annual Report of Veterinary Department, 1915, Reprint from 27th Annual Report of the State Board of Health, April, 1916, pp. 56.  
 Publication 165, Annual Report of Crippled Children Treatment, 1915, Reprint from 27th Annual Report State Board of Health, April, 1916, pp. 6, illustrated.  
 Publication 166, Vital Statistics, 1915, Reprint from June, 1916, Health Notes, pp. 44.  
 Publication 167, What You Should Know About Tuberculosis, Aug., 1916, pp. 32.  
 Publication 168, "A Health Sermon," Reprint from June, 1916, Health Notes, pp. 6.  
 Publication 169, "Sterilization of Water," Reprint from Oct. 1916, Health Notes, pp. 5.



## CLEANLINESS

Is the basic principle underlying, and it can be also said, overlying all sanitary teaching and management. It is the keystone which links the two lives—human and commercial—together. With the enforcement of its requirements, sickness is lessened if not prevented; ignore its demands and disease finds easy entrance into the home and into the community. The NOTES has dwelt upon this factor for health betterment so often that it fears its readers will want to “ring the chestnut bell” at the editor, but an axiom cannot be too often repeated for it is only by the “line upon line” continuous statement of facts that Sanitarians hope to make impressions which may finally convince and then be accepted and followed.

And while on this subject the NOTES is reminded of several complaints which have come to the executive desk lately concerning the faulty methods pursued by some of the physicians in the State who have been engaged by the County Commissioners to make the Medical Inspection of School Children which an enactment of the legislature of 1915 calls for.

It is said that an indifference to cleanly ways for making the examination of the mouth and throat is especially noticeable. It is complained that metal instruments for these examinations are used from one child to the other without being properly cleaned, or sterilized, and that the only means of cleaning that is used is to dip them in a tumbler or receptacle of water, without germicidal properties.

If these reports had not come from reliable sources the NOTES would be reluctant to believe that physicians, above all others, could be so careless in technique or so indifferent to the possibility of conveying different disease organisms from a possibly infected mouth to the mouth of a well child, by failing to thoroughly sterilize the instrument used for examination either by boiling or by washing in a disinfectant solution such as carbolic acid or bichloride of mercury.

Medical inspection of school children is an essential means to discover many physical defects of the growing child and gives the parents such information to seek correction from specialists, for to receive to advantage academic instruction which the public school system of the State offers, the child must be in a normal condition as regards sight, hearing, mouth (teeth) and throat, else it is not capable of intellectual development.

The present law is faulty in many respects, and it is probable that the forthcoming legislature will amend and eliminate unnecessary features and devise a more practical system. However until the law is altered, parents can justly complain if every safeguard in the ex-

amination is not followed and are quite right in protesting against any procedure which does not carry with it absolute cleanliness and does not embrace every precaution against possible infection of the child.

Washing and scrubbing hands and nails before examining the mouth of a child not only conforms to the technique of cleanliness but is an object lesson to the child in the same direction and gains the confidence of teachers and pupils. So, too, wooden spatulas or tongue depressors used but once and then burned before the child, insures non-conveyance of possible disease organisms from the mouth of one child to another. Elsewhere in this number under Correspondence will be found some useful information on this subject.

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### **BIRTH REGISTRATION**

Why has the United States lagged behind other civilized countries in the care and completeness with which births are registered? All the States fail to provide for some of their children the official record which may become to any citizen at any time essential for the protection of his property rights, or even of his life.

The Children's Bureau of the U. S. Department of Labor has taken up the question because the recording of births affects children immediately and in various ways. Complete registration is indispensable to any comprehensive work for the welfare of babies. Without it, regulations for the prevention of blindness in babies can not be enforced; the public health nurse can not be sure of reaching every baby in the congested districts; and the death rate among babies—that most sensitive index of social well-being—can not be reckoned either for the community as a whole or for districts within the community.

The Children's Bureau, in cooperation with the Census Bureau, has therefore devised an informal test which is carried out by local committees and which brings home to the parents of young babies the importance of accurate and complete birth registration, for, after all, it is upon the interest and understanding of parents that an absolutely complete record must, in this country, depend.

Of course a good State law is necessary to provide the machinery for registering births in each community and forwarding records to the State Registrar. A good law is necessary to give authority for the fining of physicians and midwives who habitually fail to report the births they attend, and such fining has proved essential for securing registration in some communities. But even with a good law and officials who honestly try to enforce it, there will always be some unregistered babies unless parents insist upon having their children's births recorded.

Interest in birth registration is constantly growing. Many State and city health departments are systematically working for better registration in their respective districts. Volunteer committees in 282 communities in 27 States have already reported to the Children's Bureau on local tests, and over 250 committees are now at work. And Baby Week campaigns usually include a birth registration day or some other special publicity for the subject.—*Press Service, Children's Bureau, U. S. Department of Labor.*

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### LUXURY AND GOUT

"Pray, Mr. Abernethy, what is a cure for gout?" was the question of an indolent and luxurious citizen.

"Live upon sixpence a day, and earn it," was the cogent reply.

John Abernethy, second son of a Scotch-Irish family, born April 3, 1764, a physician of rare discernment, a surgeon of great skill, a lecturer, and teacher of dramatic magnetism, never said a better thing in his life. It is particularly apt in this country where the sin of over-eating is far more common than the sin of overdrinking. Gluttony, always a fault, is all the more glaring in a land where a plentiful food supply permits it to be more general. The sallow, fat cheeks, the aching joints and irascible temper of the prosperous over-fed are far too common. Abernethy said to one such, the Duke of York, by the way, "Cut off the supplies as the Duke of Wellington did in his campaigns, and the enemy will leave the citadel."

Diet, however, is a really serious matter and many people suffer as much from dietary eccentricities and food fads as from actual disease. The average individual, can eat good, plain, wholesome food in moderation all his life without ever being aware that he has a digestive apparatus. Starvation to cure a fancied ailment or to reduce an expansive waist line has shortened many lives, just as indiscretion in the opposite direction. Certain diseases do require a particular diet but this should be chosen by a physician of skill and not self-prescribed. The self-prescriber often has a fool for a patient.

Abernethy was married on January 9, 1800, to a lady whom he met at the house of a patient. A brief courtship was followed by a proposal by letter, giving the lady a fortnight in which to make up her mind and deprecating any "dangling." He was not as temperate with regard to work as he was to food. He did not even interrupt his lectures for his wedding, and died at the age of 67, completely worn out, a victim of his gluttony for work.

## HEART DISEASE CAN LARGELY BE CONTROLLED

That heart disease is largely preventable and can be controlled is the belief of the Association for the Prevention and Relief of Heart Disease, an organization formed in New York City last year for the purpose of making a study of this disease and for bringing relief to suffering patients. The reasons given for forming this association were that there were more than twice as many deaths from heart disease than from cancer and a very great many more from tuberculosis.

According to an investigation, a considerable portion of the cases of heart disease should be considered distinctly preventable. It is chiefly those cases known as cardiac cases, which are due to infectious diseases such as rheumatism and syphilis.

To prevent rheumatism it was suggested that proper attention be given diseased tonsils, adenoids or decayed teeth, while the value of outdoor exercise and sufficient sleep in a well ventilated room was much emphasized. Any mode of life that would develop body poisons, whether it was intemperance in eating or drinking, or immorality, was to be strictly avoided.

One of the most important relief measures discovered for crippled hearts was vocational training in suitable trades. It was found that under proper supervision and control that those in such a precarious state of health could not only work and earn wages without injury to their hearts, but that it was of actual benefit to them.—*Press Service North Carolina State Board of Health.*

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## OPPORTUNITY FOR YOUNG MEDICAL MEN—GOVERNMENT FILLING VACANCIES IN PUBLIC HEALTH SERVICE

According to a statement just issued by Surgeon General Rupert Blue, young medical men between the ages of 23 and 32 will be given an opportunity each month to demonstrate their fitness for admission to the grade of Assistant Surgeon in the U. S. Public Health Service. There are several vacancies in the government's mobile sanitary corps, which is now in the 119th year of its existence, but in order to be recommended to the President for commission, a physician and professional examination must first be passed. As the tenure of office is permanent and the Public Health officers are ordered to duty in all parts of the world, they are required to certify that they believe themselves free from any ailment which would disqualify them for service in any climate. Boards will be convened at Washington, Boston, New York, Chicago, St. Louis, Louisville, New Orleans and San Francisco,



but permission to take the examination must first be obtained from the Surgeon General. The examination is searching and includes, in addition to the various branches of medicine, surgery and hygiene, the subjects of the preliminary education, history, literature and the natural sciences. The commissions will be issued as Assistant Surgeon and after four years of service, the young officers are entitled to examination for promotion to the grade of Passed Assistant Surgeon, and after twelve years of service to another examination for promotion to the grade of Surgeon. The annual salaries are: Assistant Surgeon, \$2,000; Passed Assistant Surgeon, \$2,400; Surgeon, \$3,000; Senior Surgeon, \$3,500; Assistant Surgeon General, \$4,000. When the government does not provide quarters, commutation at the rate of \$30, \$40 and \$50 a month according to grade is allowed. All grades receive longevity pay, that is, 10 per cent in addition to the regular salary for every five years until the maximum of 40 per cent is reached. When officers travel on official duties they are reimbursed their actual travel expenses.—*Health News, U. S. Public Health Service.*

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### KEEP THE NOSE AND THROAT CLEAN

It has been thoroughly demonstrated that several of our communicable diseases are transmitted by excretions from the nose and throat. We know also that many of these diseases enter the system through the nose and throat. It is, therefore, reasonable to believe that if these two air passages are kept thoroughly clean at all times that the danger of infection will be proportionately lessened.

A few years ago the physician in charge of one of our Indian Reservations required the children in the school to thoroughly cleanse their noses, mouths and throats with a simple antiseptic solution, known as Thiersch's Solution. This is a very inexpensive solution and is made in the following manner:

Dissolve half teaspoonful salicylic acid, three teaspoonsful boric acid in one quart of water.

The year after this practice was started three or four children came to the school with whooping cough, but not a single one of the children at the school who had been following this simple precaution contracted the disease. All the children in the school were required to gargle their throats and wash their mouths with this solution and also snuff it through their noses, in this way thoroughly cleansing the air passages.

This is such a simple procedure and the material is so inexpensive that it seems reasonable that every family in the State might follow this simple precaution.

Keep the nose, throat and mouth thoroughly clean and the danger of contracting communicable diseases will, to say the least, be materially reduced.—*Press Service, Washington State Board of Health.*

## COMMISSION OF MILK STANDARDS

Third Report of the New York Milk Committee—Public Health Reports, U. S. P. H. S., February 16, 1917, Page 271.

The question of producing and selling milk of high sanitary quality is very fully gone into in this report. The New York Committee has considered and recommended standards, not only for New York City, but also for cities of all sizes.

A brief summary of their recommendations follows:

### CHEMICAL STANDARDS

Cow's Milk—8.5 per cent solids not fat and 3.25 per cent milk fat.

Skim Milk—8.75 per cent solids not fat.

Cream—Not less than 18 per cent milk fat.

### BACTERIAL STANDARDS

Raw Milk, Grade—A—Milk shall not exceed 10,000 bacteria per c.c. at the time of delivery to the consumer.

Pasteurized Milk—Shall be produced from milk at no time having more than 200,000 bacteria per c.c. and after pasteurization shall not exceed 10,000 bacteria per c.c. at the time of its delivery to the consumer.

Grade B—From milk at no time containing more than 1,000,000 bacteria per c.c. pasteurized so that the bacterial count shall not exceed 50,000 per c.c.

Grade C—milk with a bacterial count exceeding 1,000,000. To be sold for cooking and manufacturing purposes only.

The committee also recommends standards for the following milk products: Cream, butter, ice cream, condensed milk, skim milk and buttermilk.

They also make recommendations for inspecting of dairies and manufacturing plants, for laboratory methods in controlling the licensing of dealers, and supervising dairy herds.

The standards as given are a distinct step in advance. It is to be hoped that physicians and health officers will carefully consider these standards when advocating laws and ordinances dealing with the milk problem.

E. G. B.

## Health Briefs

A recent investigation made to find out what class of men live the longest revealed the fact that ministers live longer than other men.

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One reason why it is difficult for most people to remove pimples is that it demands a change of not a few of their living habits—the eating of candies, meats and heavy foods without drinking sufficient water and taking plenty of exercise. Pimples follow the eating of rich, heavy foods and sweets, and are an indication of an inactive life plus an indulgent appetite.

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The United States Public Health Service has the following to say regarding longevity: “Other things being equal, it is the man who leads the well-balanced life who lasts the longest, whose work to the end is uniformly the best, he who neither over-works nor over-plays, neither over-eats, over-drinks, nor over-sleeps, he who maintains a standard of simple healthy diet in moderation, who offsets mental work with physical recreation, who is as honest with his own body as he is with his own business. When success comes to such an one his physical and mental condition is such that he can enjoy in peace of mind and contentment of body the fruits of his labors.”

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The health rules of the Crusaders, a band of boys and girls interested not only in their own health but also in the health of others, are here given and are recommended by the State Board of Health to all boys and girls in the State who would make of themselves attractive, useful men and women. They are:

“1. Always breathe fresh air. Never sleep, study, work nor play in a room without a window open. Take ten deep breaths every day.

“2. Eat nourishing food and chew it thoroughly. Drink plenty of pure water and use your own cup. Avoid food that is hard to digest, like heavy pie and cake and much candy. Never eat nor drink anything that weakens the body, like alcoholic drinks.

“3. Make sure that everything you put in your mouth is clean. Wash your hands always before eating and bathe your whole body often. Clean your teeth every day. Have a regular time every day for attending to each need of your body.

“4. Exercise every day in the open air. Keep your shoulders straight. Do not smoke before you are grown up.

“5. Get a long night's sleep. Get up smiling. Keep your mind clean and cheerful.”

## Sanitary Engineering Notes

During the month of February sanitary investigations were conducted, city councils advised and other suggestions forwarded at the following cities:

1. St. Petersburg,
2. High Springs,
3. Eustis,
4. Daytona,
5. St. Augustine.

At St. Petersburg the city commissioners were addressed in detail concerning the various processes of sewage treatment available, both the practical and theoretical aspects of the problem being discussed. Extensive chemical examinations were made in Tampa Bay in the vicinity of the sewer outlet for the purpose of ascertaining the present condition of the Bay water and also to ascertain the effect of the present sewage disposal on the stream water. Stability tests were made at several defined stations. Sewage samples were collected every half hour over a period of one day to collect thereby a typical sample for analysis. With the above data so collected a proper disposal method will be selected—a system adapted to conditions at St. Petersburg.

At High Springs the city council was addressed and urged to install a liquid chlorine sterilization plant for remedying the existing condition of the water supply.

At St. Augustine the consulting engineers were conferred with relative to the proposed sewerage system now being considered. Later extensive experiments will be conducted here for the purpose of ascertaining the condition of the receiving waters.

At Eustis an improperly operated Imhoff tank was inspected and remedies suggested. The superintendent was thoroughly advised in the operation and care of the disposal plant. The system is one of a good design, properly constructed and has been in service since November 1916. Recommendations were made to the mayor relative to the rectifying of conditions.

At Daytona the newly installed sewage disposal and pumping plant system was inspected. This disposal consists of Reinsch-Wurl screens followed by chlorination. Half hourly samples of sewage were collected of both treated, screened sewage and untreated, unscreened sewage. Furthermore, samples of water were collected from points in the Halifax river near the sewer outfall, also from points over the oyster holdings below—to ascertain the probable effect of the sewage on the water and oysters. Later a more detailed investigation will be conducted here.

Besides the above inspections advice was offered and information forwarded to various citizens relative to the disposal of household wastes in the absence of sewerage. Data was acquired from these citizens on one of our blank forms and subsequently after this data was received and considered detailed plans and instructions were submitted to them free of charge.



The refuse (garbage and rubbish) problem has been carefully studied for the cities of Clearwater and Winter Haven and very shortly detailed reports will be submitted to each city advising along this important line of endeavor.

During the month of February the following work was done in our water and sewage laboratory:

100 bacteriological water analyses.

1 complete sanitary chemical water analysis.

12 complete sanitary chemical sewage analyses.

The work in sewage analysis is increasing on our own initiative in order that we may secure definite data relative to the efficiency of operation of our small town sewage disposal plants.

## Correspondence

### CORRECT MANAGEMENT IN "MAD DOG" CASE

A week or two ago a child living in a Florida town was bitten by a dog which was thought to be mad. The mother of the child, which was perfectly natural, was very anxious that something be done at once, and wanted the dog killed and its head shipped to the laboratory of the State Board of Health to be examined for rabies. The city officials, however, refused (and justly so) to kill the dog, upon which the anxious mother sent the following telegram to the State Board of Health:

Child bitten today by a dog apparently normal. Have demanded that dog be killed and head shipped. Officials refused. Officials have ordered dog held for twenty days awaiting developments. Please wire advice at once.

It was very gratifying to the State Health Officer to find that the town officials were taking the proper action in the matter; if the dog had been killed, as demanded by the mother, all means of determining whether or not the dog was rabid would have been destroyed, for it is well known that in the early stages of this disease it is impossible to determine by microscopical examination of the brain, the presence of rabies, as the Negri bodies do not appear in the brain at the onset of the disease. On the other hand, by penning the dog up and keeping under observation, the city officials knew that, if the animal were rabid, he would, in a few days, show definite symptoms of the disease. (As a matter of fact, the animal would have died in about five days if suffering with rabies). The following telegram was sent in reply:

If rabid, dog will die within six days. If alive after that time with no symptoms, denotes viciousness and not rabies. Officials did right in confining and not killing dog. Advise if dog dies, and if so, send head for examination.

(Signed) Joseph Y. Porter, State Health Officer.

Up to this time, nothing further has been heard from the above case, and the expense and painfulness of Pasteur treatment was saved to the child, who would probably have had the treatment administered as a precautionary measure had the dog been killed, and the parent was relieved of a heavy load of anxiety.

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### WANTS BABIES JUDGED

Dr. Joseph Y. Porter, State Health Officer, Jacksonville, Fla.

Dear Doctor: We had not arranged for any judging of babies, as our physicians all seem so overwhelmed with work, they said they had no time, but a very prominent and influential member of our Association has become so enthused over the event, she thinks we should try to have it, and she has secured a whole lot of prizes to be given to, not the prettiest, but to the finest girl baby, finest boy baby, finest twins, and some others. Now if we cannot get our own doctors to come out and do this, are you not

equipped to do it on your train? And would it be done the second day you are here? Please excuse me if I am asking the impossible. We are new at the business.

Yours very truly,

## ON EDUCATIONAL HEALTH EXHIBIT TRAIN

My Dear Madam:

Your letter in regard to a "Better Babies Contest" to be held this week, having been forwarded from the Jacksonville office is promptly acknowledged to express my appreciation of your very flattering estimation of the ability of the State Board of Health to determine what are, and what are not perfectly formed babies.

While I yield to no man in the State of Florida my interest in, or love for children, I cannot conceive that it is a part of the duty of any one connected with the State Board of Health to act as judge in these matters. It is a community problem and should be considered and determined by the local medical profession therein.

The State Board of Health of Florida, is primarily an educational factor in promoting good health in the citizens of the state and preventing diseases which may be communicated from one individual to another, through neglect or indifference to observe conditions which the laws of health and requirements of domestic and civil sanitation clearly indicate are necessary to avoid sickness and prolong life.

Preparedness to a healthy existence commences from the time that the life germ develops in the mother, and pre-natal environment and habits influence, to a great degree, and I might almost say entirely the future existence of the individual from its beginning as an infant and maturing up to adult age.

Hereditary traits, both mental and physical, are striking illustrations of nature's law of parental transmission, therefore, when the State Board of Health through its teachings indicate how expectant mothers should be prepared to discharge that most solemn duty to themselves and to the public—the maternal obligation—and how the infant should be protected in its life struggle against disease, which preventive measures have scientifically emphasized, it is thought that its duty in this respect to the public has been fulfilled.

In the Educational Health Exhibit Train, are panel texts on these subjects assisted by stereomotorgraph slides, illustrating the different phases of baby management, such as proper feeding, clothing, care of the body and ventilation. Subjects depicting the evils of improper management of school children are also fully described in the slides and panel texts which are so plainly written in large type that there can be no mistake or misunderstanding of their meaning.

I am sorry if I am disappointing you, but I greatly prefer not being entangled in a contest of this nature, because the State Board of Health wishes to make friends and encourage cooperation and not opposition. Being a parent and a grandparent I know what decisions of this kind, however honestly made and conscientiously given, may provoke.

I trust that you will visit the train where I shall be glad to receive you and welcome you.

Very truly yours,  
(Signed) Joseph Y. Porter, State Health Officer.

## Press Comment

### CITY COUNCIL TO COOPERATE WITH HEALTH OFFICER IN ENFORCEMENT SANITARY LAWS

Dr. Vanlandingham, City Health Officer, made a report on the sanitary conditions of the city, and in doing so asked the cooperation of the council in the enforcement of the sanitary laws. In many instances this has been very lax, especially as relates to grocery stores and livery stables, and he urges that these be made to comply with the law, and that the officer empowered to do this, be instructed to carry out the full letter of the law.—Ft. Pierce News.

### MISS FOOTE TO DELIVER A TALK TO FELLSMERE SCHOOL, FEBRUARY 7, 1917

Miss Irene R. Foote, who is one of the representatives of our very efficient State Board of Health and who has been in Fellsmere before as the guest of the Fellsmere Library Association, writes that she will be in Fellsmere at the invitation of this organization on Wednesday, February 7th, to deliver a talk before the school on health matters. Miss Foote is not only an expert in her line, but a very interesting talker. It is especially desired that every child in Fellsmere of school age be at this talk and also the school partons so that the valuable information which Miss Foote will give may be as widely disseminated as possible throughout the community.

Remember, next Wednesday, the 7th, at the school house.—Fellsmere Tribune.

### HEALTH DAY AT HIGH SPRINGS

The third day was "Health Day," and the program for that day was arranged by J. Clyde Brown, Superintendent of the High Springs Electric Light and Water Works. This was possibly the very best day of all. Mr. Brown had the whole State Board of Health with us for three full days, now when we say "whole State Board of Health" we mean the Health Train of three cars were parked on main street almost in the center of the public square and what that train and Dr. Young and Dr. Tompkins and Miss Herndon who generally go with it mean to the people of the State of Florida I find no language adequate to express. Dr. Young was to have made the address on health, but was prevented from coming and Dr. Tompkins read a paper telling of the work of the State Board of Health and its work for the good health of the people of Florida.

Three reels of moving pictures were shown daily, fully illustrating how the people of Florida can eradicate the mosquito, housefly, cattle tick, hook worm and all kinds of germs and how to prevent and cure many diseases such as typhoid, malaria, consumption, and by early caring for the teeth prevent toothache, and by caring for your digestion prevent stomach ache and many other diseases that give us daily trouble. The health train is an educational institution within itself and no person of whatever age can go through it without being largely benefited by the plain teachings illustrated everywhere you look as you go through, and every town in Florida should arrange for the Health train to visit their town and profit by the good work it is doing to help prevent and cure many dangerous diseases. We take off our hat to Dr. Joseph Y. Porter in humble recognition of his notable work and untiring efforts with able corps of assistants to help stamp out disease in the State of Florida that can be prevented and cured by intelligent care and training. I am authorized by the good people of High Springs to thank Dr. Porter and Dr. Tompkins and the State Board of Health for the much appreciated favor of coming to our city and we hope to have them here again at our next annual Chautauqua, if not sooner.—"A Booster" in Gainesville Sun.



## Veterinary Notes

### SOME DISEASES IN SWINE

#### MANGE OR SCABIES IN SWINE

Hog mange is caused by a sarcoptic mite, and occurs frequently, in large droves, especially in certain long-haired breeds, while other breeds may be exposed and remain unaffected. The young animals are most susceptible. Debilitating diseases seem to predispose to its onset.

The disease develops, with violent itching, on the back of the head and around the eyes and ears, on the back, on the sides of the body and inner surface of the thighs. Dry, branlike scales collect upon the affected areas, and bristles fall out, and large, grayish-white crusts form, giving the animal the appearance of having been sprinkled with guano. Hog mange is transmissible to other animals, as well as to man.

Treat by removing the scales and crusts with brush, soap and water, and afterward, by the use of a mixture of oil of turpentine and sulphur, one to eight. These may be rubbed into one-half of the body on alternate days. In outbreaks where large numbers are to be treated, the hogs may be run through a hog dipping vat containing 2 per cent solution of cresol as a dip. The dipping must be repeated once or twice at eight-day intervals. This treatment would also be effective against lice and other insects.

To prevent re-infestation the animals should be moved to new pens or lots after each treatment and finally put into lots where no infested hogs have been. The old infested premises should be kept free of animals for four months, if it is impracticable to disinfect them.

#### MEASLES IN SWINE

Measly pork is pork meat that is infested with the larval stage of a human tapeworm—*Taenia solium*. Segments or egg-bearing parts of the worm are given off from the human body, regularly. These eggs are eaten by the hog and their shells are digested off in the stomach of the hog. The egg then develops into an embryo in the intestine, bores through the bowel and lodges in the muscles.

In nine weeks the embryo has developed into a mature measele worm which is capable of reproduction.

It now encloses itself in a cyst or capsule and lies dormant until the death of its host from natural causes or from slaughter. Its development to this infectious stage requires three months.

If now we eat this pork that contains these measle worms, these adhere to the lining of the intestines by means of suckers and hooks, form chains of segments which become mature and filled with eggs. The remedy here, is, like in trichinous pork, to cook it thoroughly.

## WORMY SWINE

Intestinal worms are a serious menace to the hog. The two principal kinds found in the hog's bowel are the large round worm known as the *Ascaris lumbricoides* and the giant thorn-headed worm known as *Echinorhynchus gigas*, the latter being by far the more dangerous, because it bores holes through the wall of the intestine and causes peritonitis which always results fatally. Worms are most harmful to pigs at the ages of two to five months. In a general way pigs are wormy when, excluding cholera, they are unthrifty, when the hair is lustreless and stands on end; when there is cough; when, even though the appetite is fairly good, the pig continues to lose flesh; when there is discharge from the nose; when the eyes are dull; and when a pig now and then dies. If the dead pig is examined, large numbers of the round worm can be found in the intestine, and it frequently happens they crawl up into the liver. The round worm or *Ascaris lumbricoides*, is by far the most common intestinal worm; and becomes dangerous only when it accumulates in very large numbers. It frequently happens that that part of the intestine near the stomach is completely blocked by this worm.

*The Giant Thorn-head Worm (Echinorhynchus gigas)* is the next intestinal worm of importance. Here it is not a question of numbers, as in the preceding worm, because one of these giant thorn-head worms can cause death.

Hogs of all ages frequently die from peritonitis caused by punctures of the intestine by this worm. They have violent pain in the belly. There is loss of appetite, constipation and restlessness; the animal will paw and burrow and apply the teeth or snout against the sides; the animal grows thinner and thinner; there may be convulsions or fits, and young pigs may die in three or four days. A large percentage of the pigs may die. The worm may be found attached to the inner lining of the bowel and is from six to ten inches long, and has a curved body. It has a thorny head and is called the Giant Thorn-head worm (*Echinorhynchus gigas*). Prompt measures should be taken to not only treat wormy hogs but the feed lots and other infested places should be treated in a manner that will insure the destruction of the eggs that are infesting them. This is carried out by raking off and burning all refuse in the feed lot; covering the surface with lime and plowing the ground and applying more lime; then harrow so as to thoroughly mix soil and lime; and more lime and roll thoroughly so as to make the ground very firm. This advice applies also to cholera-infected lots.

As medical treatment for the hogs the following is recommended: Santonin, 3 grains; calomel, 1 grain; bicarbonate of soda,  $\frac{1}{2}$  dram.

Give each 50-lb. pig this quantity. Hogs weighing over 125 lbs. may be given double this dose and when necessary these doses may be repeated in one week. Give this medicine under the following plan: Withhold feed and water for twenty-four hours and see that each one gets its proper proportion of the remedy. This is best accomplished by thoroughly mixing the medicine in a thin slop and providing plenty of troughs. Or, better still, dose each animal, by hand.

The U. S. Department of Agriculture recommends the following mixture as a powder for worms in hogs:

Charcoal, pulverized.....	1 bushel
Hardwood ashes.....	1 bushel
Table salt.....	8 pounds
Lime .....	8 pounds
Sulphur .....	4 pounds
Copperas .....	2 pounds

Directions for mixing: Dissolve the copperas in hot water and pour it over the mixture of the other ingredients. Place the powder in a dry place accessible to the hogs.

There are several brands of commercial worm powders on the market. Any of these are, no doubt, effective if used according to the manufacturer's directions.

### CONSTIPATION IN SWINE

On account of the lazy life lead by some hogs, due to enforced idleness, and unwise methods of feeding, their bowels become inactive and a case of constipation ensues.

The hog becomes restless and strains. The manure is hard and covered with mucus. The appetite diminishes and the animal seems dull.

The condition can often be overcome by feeding grass, roots or pumpkins or other fresh vegetables, or by giving one to three ounces of castor oil, or one to three ounces of Epsom salts dissolved in water. If the case does not respond, try one to three ounces of castor oil to which two drops of croton oil have been added.

In drenching a hog never turn it on end, as the medicine may go down into the lungs and strangle the animal. Also do not drench while the hog is squealing. A good way to give a liquid to a hog is to cut the toe out of an old shoe, put this into his mouth and pour the medicine into the shoe, allowing the hog to chew the shoe. Or a piece of garden hose and a funnel may be used the same way.

To prevent the trouble from recurring, see that the animal gets more exercise and laxative feed, in the form of green vegetables and grasses.

### SWILL CHOLERA

This is an affection caused by feeding hogs swill and offal from the kitchen. In many cases the swill contains dishwater slop heavily charged with granulated soap, and in others putrid meat scraps and fermenting grains and vegetables. The symptoms resemble somewhat hog cholera, and as all of a drove or even several droves in the same neighborhood may be affected, the owners fear an outbreak of the genuine hog cholera.

### CONGESTION OF THE LUNGS IN SWINE

This is apt to be brought on in hogs in high flesh that are undergoing undue excitement as in catching for administration of serum. It is frequently fatal, from hemorrhage. The hog appears "winded" and markedly distressed. The mouth is held open to get air. The heart is

rapid and weak, and the animal is liable to drop suddenly. In case of hemorrhage bloody foam will run from the mouth and nostrils. If there is time to treat give a mixture of one teaspoonful of aromatic spirits of ammonia and four teaspoonsful of alcohol or eight teaspoonsful of whiskey in water every half hour. Keep the animal warm and rub the legs briskly to promote circulation.

## TRICHINOSIS

This disease of the hog is most interesting and important because of its relation to the human health.

The trichina worm (*Trichina spiralis*) is a small hairworm, the male being one-twentieth of an inch long, and the female being one-eighth to one-sixteenth of an inch in length. It was imported into Europe in Chinese pigs, and has spread all over the civilized world. It was first found in man in 1860, in Dresden. Two forms of the worm are distinguished, the sexually-mature intestinal trichina, and the sexless muscle trichina.

The intestinal or adult trichina lives on the inside lining of the intestine and the female produces about 1,500 young or embryos during the six weeks of her life.

The muscle trichina is the larval form of the above from whose embryo it develops and is about one-twenty-fifth of an inch long. It lies, coiled up, in the muscles and surrounded by a cyst.

Uncooked or rare meat is eaten and these encysted larval trichinae are liberated from their cysts by the action of the gastric juice. These, in forty-eight hours become mature intestinal trichina. These mate and bring forth numerous young trichinae or embryos, which burrow through the intestinal walls and into the blood vessels and are deposited in the muscles where, after wandering for two or three weeks, they lie dormant for two weeks, growing into a muscle trichina, assuming a spiral form and surrounding themselves with a cyst or capsule. This whole process occupies about a year. The life cycle is completed when this muscle trichina is eaten in meat and is liberated by the act of digestion, and has changed into the adult intestinal trichina.

These worms cause no symptoms in hogs that could be ascribed to it; but when the uncooked or rare trichinous meat is eaten by man, a chain of grave symptoms present themselves; resembling, at times, rheumatism, and at others, typhoid fever.

From a meat-inspection standpoint the examination of pork for trichina was one of the most important lines of work. Now all pork shipped from the United States to Europe is frozen to kill the worm.

The remedy for this painful disease consists solely in prevention by cooking all sausage and other pork meat thoroughly.



## Summary of Public Health Administration, January

### WEST COAST DISTRICT

Tampa: Routine work, office of Assistant to the State Health Officer. Sanitary nuisances investigated and reported to city sanitary department. Suspected cases smallpox investigated. Differential diagnosis scarlet fever at request of attending physician. Visit of inspection to isolation hospital. Investigation suspected rabid dog; advice as to method of observation. Investigation of dumping ground in Ybor City; reported to city sanitary department.

West Tampa: Differential diagnosis scarlet fever at request of attending physician.

Arlington Heights: Cesspool nuisance investigated.

### WESTERN DISTRICT

Pensacola: Routine work, office of Assistant to the State Health Officer. Management of communicable diseases, and supervision of inspections by sanitary inspector as follows: Screening Law—meat shops 2, butcher shops 1, grocery stores 5, bakeries 1, fruit stands 6. Surface Closets and Water Carriage Laws—Private residences 15. Abatements ordered 19. Communicable Diseases—smallpox 2, tuberculosis 4, scarlet fever 5, diphtheria 4; fumigations, releases, etc., 8.

### SOUTH EAST COAST DISTRICT

Key West: Routine work, office of Assistant to the State Health Officer. Nuisances investigated and corrected. With assistance of district public health nurse public meeting held in Key West and addresses on Tuberculosis given by local physicians. Permits issued for transportation of corpses. Routine laboratory work.

### SOUTH CENTRAL DISTRICT

Plant City: Routine work office of Assistant to the State Health Officer.

### CENTRAL DISTRICT

Ocala: Routine work office of Assistant to the State Health Officer. Consultation with local physicians concerning diagnosis of eruptive disease; found to be measles.

Kendrick: Investigation epidemic of measles, and management of same.

### NORTH CENTRAL DISTRICT

Live Oak: Routine work office of Assistant to the State Health Officer. Microscopical work for local physicians. Isolation of measles cases. Two days work in assisting in demonstrating Florida Health Exhibit Train. Conference with school officials regarding proper way of handling measles among school children.

### NORTH EAST COAST DISTRICT

St. Augustine: Routine work office of Assistant to the State Health Officer. Collection of water sample for analysis.

Daytona Beach: Address to council on sanitary matters.

## WEST CENTRAL DISTRICT

Tallahassee: Routine work office of Assistant to the State Health Officer. Examination of school teacher for tuberculosis; result negative. Fumigation of house recently vacated by tuberculous family. Investigation of cases typhoid fever and chicken pox.

Cottdale: Investigation outbreak of rabies; situation controlled.

Malone: Investigation cases suspected acute anterior poliomyelitis.

Marianna: Sanitary inspection.

## EDUCATIONAL HEALTH EXHIBIT TRAIN

Towns visited during January: Tallahassee, Carrabelle, Sopchoppy, Arran, River Junction, Greensboro, Mt. Pleasant, Gretna, Quincy, Midway, Chaires, Capitola, Lloyd, Drifton, Monticello, Aucilla, Greenville, Madison, Lee's, Ellaville, Live Oak, Wellborn, Lake City, Watertown, Olustee. Total number of towns visited in 1917 to February 1st..... 25

## PUBLICITY AND PUBLICATIONS

Monthly bulletin "Health Notes," Vol. XII, No. 1, January, 1917, pp. 32. Press service bulletins to Florida newspapers: Jan. 2, "New Year Resolving;" Jan. 10, "Nineteen Sixteen;" Jan. 17, "Bureau of Sanitary Engineering;" Jan. 24, "Florida's Health Laws;" Jan. 31, "Wards of the State and Their Protection."

Publications out in January: none.

## DISTRIBUTION OF LITERATURE DURING JANUARY

Mailed upon request and distributed in field.....	4,285
Press service bulletins to Florida newspapers.....	1,500
Health Notes, mailing list.....	10,600
Total number pieces distributed.....	16,385

## SMALLPOX

Reported cases of smallpox in Florida, January, 1917:  
 Pensacola, Escambia County..... 2

## DISTRICT TUBERCULOSIS INSPECTION

Monthly Report, Status of Tuberculosis District Nursing, Month Ended January 31, 1917

<i>Residence of Cases Visited to Date by Districts</i>	<i>Total Number of Cases Under Instruction Last Report</i>	<i>New Cases Found Month Ended</i>	<i>Cases Found to Have Died</i>	<i>Cases Removed</i>	<i>Cases Apparently Cured</i>	<i>Total Number of Cases in Districts Under Instruction to Date</i>	<i>Total Number of Cases Following Instruction</i>
District No. 1.....	64	3	1	4	..	62	53
District No. 2.....	48	..	..	..	..	48	25
District No. 3.....	153	2	..	..	..	155	93
District No. 4.....	74	..	..	..	..	74	64
District No. 5.....	153	2	4	2	..	149	94
District No. 6.....	216	10	1	5	1	219	170
District No. 7.....	52	3	6	12	5	32	32
District No. 8.....	115	4	2	4	2	111	54
District No. 9.....	164	26	11	8	6	165	165
District No. 10.....	128	37	2	2	..	161	76
District No. 11.....	107	7	2	1	..	111	78
District No. 12.....	190	31	13	..	..	208	208
Colored Nurse, State at large.....	146	22	9	1	10	148	124
Total.....	1,610	147	51	39	24	1,643	1,236

## BIOLOGICAL PRODUCTS

Distribution of Biological Products during January (anti-rabic vaccine, diphtheria and tetanus antitoxin free to indigent only.) Number of persons receiving treatment

<i>County and Town</i>	<i>Anti-Smallpox Vaccine</i>	<i>Anti-Rabic Vaccine</i>	<i>Anti-Typhoid Vaccine</i>	<i>Diphtheria Antitoxin Curative and Immunizing</i>	<i>Tetanus Antitoxin Immunizing</i>
ALACHUA					
Gainesville .....	..	..	..	2	..
BAY					
Panama City .....	..	..	..	18	..
BREVARD					
Cocoa .....	..	1	..	..	..
CALHOUN					
Port St. Joe .....	..	..	..	2	..
DADE					
Miami .....	60	..	..	..	..
Princeton .....	..	..	..	..	1
DUVAL					
Jacksonville .....	..	1	8	1	4
ESCAMBIA					
Pensacola .....	..	..	..	4	..
Pine Barren .....	..	..	..	2	..
FRANKLIN					
Apalachicola .....	..	..	6	8	..
GADSDEN					
Chattahoochee .....	50	..	..	..	..
River Junction .....	..	3	..	..	..
JACKSON					
Cottondale .....	..	2	..	..	..
LAFAYETTE					
Alton .....	..	..	56	..	..
MADISON					
Madison .....	..	1	..	..	..
MARION					
Ocala .....	10	..	..	..	..
MONROE					
Key West .....	..	..	..	1	1
SEMINOLE					
Chuluota .....	20	..	..	..	..
SUMTER					
Coleman .....	10	..	..	..	..
VOLUSIA					
Daytona .....	..	..	..	5	..
TAYLOR					
Lake Bird .....	..	..	10	..	..
WAKULLA					
Aurora .....	..	..	16	..	..
WASHINGTON					
Chipley .....	..	1	..	..	..
Total .....	150	9	96	43	6



## CRIPPLED CHILDREN

NAMES	In St. Lukes 1-1-17	In Brewster (Col.) 1-1-17	Outside Treatment	Applications Received	Admitted St. Lukes	Admitted Brewster	Admitted for Office Treatment	Examined, not Admitted	Total Cases During Month	Operating, Plaster Work, Special Treatment, Etc.	Date Discharged and Condition	Diagnosis	Under Treatment 2-1-17
C. B.	1								1	Draining abscess neck. Brace made for hand.		Volkman's contracture, wrist	1
A. B.				1									
O. D.	1			1-22-17					1	Bismuth paste treatment		T. B. Kidney...	1
D. Y.		1											
G. G.	1			1-15-17*					1	Corrective cast 1-12-17		Club foot	1
H. C.				1					1				
W. H.	1			1-29-17					1	Massage	1-19-17. Unimproved	Muscular Dystrophy	1
M. P.				1					1				
W. L.	1			1-19-17†					1	Cuneiform osteotomy lower end tibia. 1-10-17. Cast 1-27-17.		Eversion of foot from old osteomyelitis of ankle	1
H. M.	1								1	Curetting sinuses 1-16-17.			
F. P.	1								1	Daily electric light treatment of wounds		T. B. Hip	1
I. P.	1								1	Daily electric light treatment of wound		T. B. Hip	1
C. P.	1								1	Daily dressings	1-24-17. Unimproved	Osteomyelitis tibia	1
A. T.	1								1	Dressings		T. B. Spine and Hip	1
R. W.	1								1	Massage and gymnastics		Hopeless case Old osteomyelitis tibia	1
W. D.	1			1-2-17					1	Sequestrectomy lower end femur. 1-13-17. X-Ray 1-10-17		Spastic paraplegia	1
H. M.	1			1-22-17					1	Daily dressings. X-Ray 1-30-17		Osteomyelitis lower end of tibia, (chronic)	1
C. J.		1		1-21-17					1	Plaster jacket 1-31-17		Osteomyelitis 2nd Lumbar Vertebra	1
									1	Plaster spica of hip 1-21-17		T. B. Hip	1
Total	13	2	7	3					16		3		13

\*Formerly treated under this fund.

†Old case.

## BACTERIOLOGICAL LABORATORIES

## SPECIMEN EXAMINATION

	Jacksonville	Tampa	Pensacola	Key West	Miami	Tallahassee	Total
Animal Parasites.....	308	96	39	3	8	24	478
Diphtheria .....	252	123	47	..	21	3	446
Gonorrhoea .....	102	42	68	1	19	2	234
Malaria .....	169	131	28	2	19	42	391
Pathological .....	1	2	..	..	6	..	9
Rabies .....	8	2	1	..	..	..	11
Tuberculosis .....	214	87	42	3	29	15	390
Typhoid .....	137	83	23	..	12	25	280
Water: Bacterial Ex....	..	..	1	1	24	..	26
Wassermann .....	375	103	..	..	..	..	478
Miscellaneous .....	18	50	23	7	48	34	180
	<u>1,584</u>	<u>719</u>	<u>272</u>	<u>17</u>	<u>186</u>	<u>145</u>	<u>2,923</u>

Total number of specimens examined in the laboratories of the State Board of Health of Florida during January, 1917.....2,923



(MALARIA)

TOWN	Diphtheria	Gonorrhea	Etiocautumna	Quarant	Tertian	Species not Determined	Typhoid	Tuberculosis	Uncinaria	Ascaris	Lambia	Intestinalis	Trichinaria	Tapeworm	Oxyuris	Ameba	Rabies	Wassermann	Leprosy
Sorrento .....	..	..	..	..	..	..	..	..	2	..	..	..	..	..	..	..	..	..	..
Starke .....	..	1	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..
Tallahassee ....	..	1	3	..	4	..	2	1	5	2	..	..	..	..	1	..	..	2	..
Tampa .....	9	8	..	..	1	..	5	12	7	1	1	..	1	..	..	1	..	20	..
Port Tampa....	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Tarpon Springs ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..
Titusville .....	..	1	..	..	..	..	..	1	11	..	..	..	1	..	1	..	..	..	..
Wauchula .....	..	..	..	..	..	..	1	2	..	..	..	..	..	..	..	..	..	..	..
Wellborn .....	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..
W. Palm Beach ..	..	..	..	..	1	..	1	1	1	..	..	..	..	..	..	..	..	..	..
White Springs ..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..
Williston .....	..	..	..	..	..	..	1	..	3	..	..	..	..	..	..	..	..	..	..
Zolfo .....	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..
Total.....	56	60	6	..	11	5	35	79	132	9	1	9	2	4	2	4	139	1	1



# BUREAU OF VETERINARY SCIENCE TICK ERADICATION

Cattle dipping vats reported constructed during December, 1916:

None.

Total number of vats reported constructed to January 1, 1917.....122

## GLANDERS

Diagnosed by Veterinarian during December, 1916:

Jacksonville, Duval County.....1 horse, \$75.00

Jacksonville, Duval County.....1 horse, 75.00

## IMPORTATION OF CERTIFIED LIVE STOCK

Horses, 144; mules, 861; cattle, 85; hogs, 53.....1,143

## EXPORTATION OF CERTIFIED LIVE STOCK

Horses, 4; mules, 22; cattle, 66..... 92

## VETERINARY INSPECTION FOR THE MONTH OF DECEMBER

December 1, Live Oak, hog cholera; December 1, Branford, stomatitis in horses and mules; December 4, Jacksonville, disinfecting cattle pens at fair grounds; December 11, Madison, vat construction; December 11, Jacksonville, consult with Executive Office; December 13, Quincy, investigate disease in cattle; Escambia County, 26 days work on vat construction.

## TICK ERADICATION

Cattle dipping vats reported constructed during January, 1917:

None.

Total number of vats reported constructed to February 1.....122

## GLANDERS

Diagnosed by Veterinarian during January, 1917:

Jacksonville, Duval County.....1 horse, \$75.00

Jacksonville, Duval County.....1 horse, 75.00

## IMPORTATION OF CERTIFIED LIVE STOCK

Horses, 153; mules, 880; cattle, 114; hogs, 57; dogs, 2.....1,206

## EXPORTATION OF CERTIFIED LIVE STOCK

Horses, 28; mules, 7; cattle, 24..... 59

## VETERINARY INSPECTIONS FOR THE MONTH OF JANUARY

January 1-2, Jacksonville, test on two horses for glanders; January 2, Jacksonville, inspection of three mules; January 6-7, Jacksonville, test horse for glanders; January 8-18, Ft. Lauderdale and Rita, quarantine and spray cattle at Bolles and Murray places; January 13, Newberry, diseases in cattle; January 16-19, Gainesville, attending convention of State Live Stock Association; January 17-19, Gainesville, attending meeting of State Live Stock Association; January 20, Jacksonville, consultation in office; January 22-25, Polk and DeSoto Counties, investigation of proposed stock farms; January 23-24, Jacksonville, test two horses for glanders; January 30, Jacksonville, consultation with office.



# HEALTH NOTES

OFFICIAL BULLETIN

PUBLISHED MONTHLY BY THE

## STATE BOARD OF HEALTH

ENTERED AS SECOND CLASS MATTER, FEBRUARY 17, 1915  
AT THE POSTOFFICE AT JACKSONVILLE, FLORIDA, UNDER THE ACT OF JULY 16, 1894

Vol. XII

March, 1917

No. 3 (New Series)

HON. FRANK J. FEARNSIDE, President  
Palatka, Fla.

HON. S. R. MALLORY KENNEDY, M. D.  
Pensacola, Fla.

HON. C. G. MEMMINGER  
Lakeland, Fla.

EDITED BY

JOSEPH Y. PORTER, M. D., Secretary and State Health Officer

EXECUTIVE OFFICE

State Board of Health Building, Springfield Boulevard  
Jacksonville

### BRANCH OFFICES

ASSISTANTS TO THE STATE HEALTH OFFICER

Tampa Key West St. Augustine  
Pensacola Gainesville Ocala

### AGENTS

Miami Fernandina Palatka

### BACTERIOLOGICAL LABORATORIES

CENTRAL LABORATORY

Jacksonville

### BRANCH LABORATORIES

Tampa Pensacola Miami  
Tallahassee Key West

This Bulletin will be sent to any address in the State free of charge.

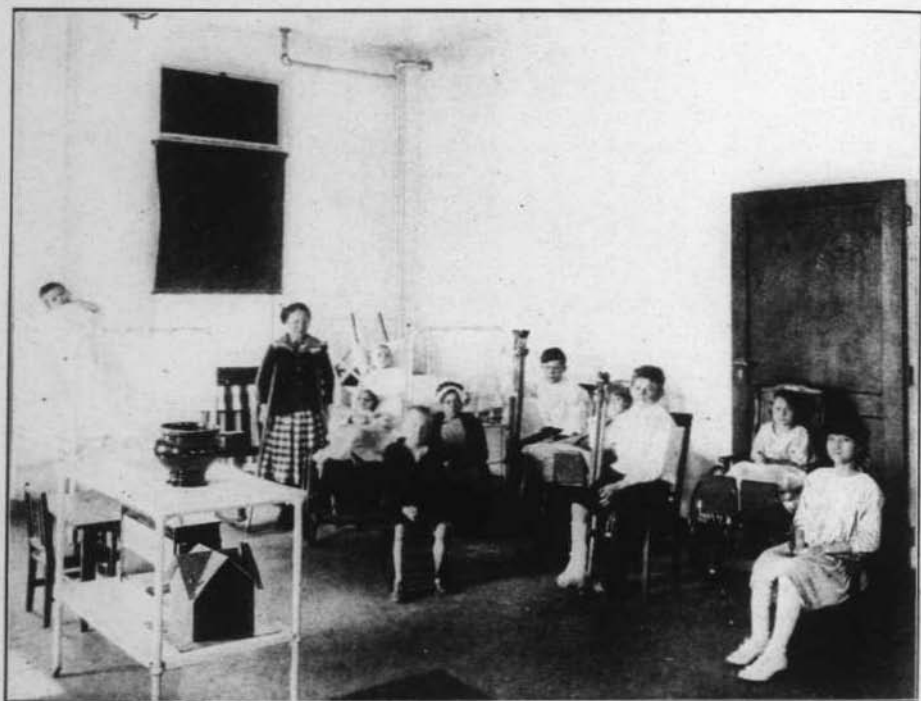
In case of outbreaks of smallpox, typhoid fever, diphtheria, scarlet fever, or any contagious disease, report to the State Health Officer, Jacksonville, and, if necessary, a medical officer will be detailed to take charge.

If you wish to know how to avoid tuberculosis, typhoid fever, malaria, hookworm, smallpox, diphtheria, etc., address the State Health Officer, Jacksonville.

If you think you have tuberculosis, typhoid fever, malaria, hookworm, or diphtheria, have your doctor take a specimen and send to one of the State Board of Health laboratories for examination.

Anything you want to know about sanitation and public health the Executive Office will try to tell you.

Should you have contagious diseases among your live stock, write to the State Health Officer for advice and help.



Views of children's ward St. Luke's Hospital, Jacksonville, showing some of the patients treated under the provisions of the Crippled Children Act

# LIST OF STATE BOARD OF HEALTH PUBLICATIONS FOR FREE DISTRIBUTION

- Poster 58, From Flies and Filth to Food and Fever, 1908, Third Edition, 12"x23"  
 Poster 67, The Evolution of Consumption, August, 1913, Second Edition, 22"x30"  
 Publication 77, The House Fly, Second Edition, May, 1914, pp. 11.  
 Publication 82, Twenty-Second Annual Report of the State Board of Health of Florida, 1910, pp. 171.  
 Publication 86, Prevention of Ophthalmia Neonatorum, 1911, pp. 3.  
 Poster 90, Smallpox Vaccination, April, 1912, 18"x24"  
 Publication 92, Rules and Regulations of the State Board of Health and Public Health Statutes, with Supplements, March, 1912, pp. 77.  
 Publication 93, Twenty-Third Annual Report of the State Board of Health of Florida, 1911, March, 1912, pp. 372.  
 Publication 99, Sewage Disposal for Rural Homes, Revised, Second Edition, August, 1914, pp. 10.  
 Publication 100, Twenty-Fourth Annual Report of State Board of Health of Florida, 1912, February, 1913, pp. 232.  
 Publication 103, Cattle Tick Eradication, Reprint from the 24th Annual Report of the State Board of Health of Florida, March, 1913, pp. 54.  
 Publication 105, Malaria, April, 1913, pp. 8.  
 Publication 106, Mosquitoes, May, 1913, pp. 16.  
 Publication 108, Diphtheria, March, 1914, pp. 4.  
 Publication 109, Measles, March, 1914, pp. 4.  
 Publication 110, Scarlet Fever, March, 1914, pp. 4.  
 Publication 111, Smallpox, March, 1914, pp. 4.  
 Publication 112, Twenty-Fifth Annual Report of the State Board of Health of Florida, 1913, March, 1914, pp. 293.  
 Publication 117, Imhoff Tanks, May, 1914, pp. 6.  
 Publication 118, Hookworm Disease and Soil Pollution, May, 1914, pp. 13.  
 Publication 119, Consumption Leaflet, June, 1914.  
 Publication 120, Rules and Regulations for the Importation of Domestic Animals into Florida, August, 1914, pp. 4 (Supplement to Publication 92).  
 Publication 122, Common Sense in Contagion, October, 1914, pp. 8.  
 Publication 123, Smallpox, December, 1914, illustrated, pp. 44.  
 Publication 124, The House Fly, Carrier of Disease, December, 1914, illustrated, pp. 16.  
 Publication 125, Baby Welfare, December, 1914, illustrated, pp. 17.  
 Publication 126, Typhoid Fever, December, 1914, illustrated, pp. 23.  
 Publication 127, Hookworm Disease, December, 1914, illustrated, pp. 30.  
 Publication 128, Pure Water, December, 1914, illustrated, pp. 21.  
 Publication 129, Tuberculosis, Its Cause, Prevention and Treatment, December, 1914, illustrated, pp. 18.  
 Poster 130, Hookworm, December, 1914, 12"x25"  
 Publication 131, The Serum Treatment of Hog Cholera by the "Single" and "Double" Methods, December, 1914, pp. 13.  
 Poster 132, The Barn That Jack Built, Sanitary Poster, December, 1914, 15"x25"  
 Publication 133, General Sanitary Management, December, 1914.  
 Publication 134, Twenty-sixth Annual Report of the State Board of Health of Florida, 1914, pp. 247.  
 Publication 135, Hookworms in Dogs, pp. 4, Reprint from Vol. IX, No. 10, October, 1914, Health Notes.  
 Poster 136, Rats, 11"x20"  
 Publication 139, Notice of Quarantine, Dade County, May, 1915, pp. 4.  
 Publication 140, Rules and Regulations, Cattle Tick Eradication, Florida, May, 1915, pp. 6.  
 Publication 141, Hookworm, leaflet, June, 1915.  
 Publication 142, A Few Remarks on Preventive Medicine, July, 1915, pp. 16.  
 Publication 143, Flies, July, 1915, pp. 4.  
 Publication 144, Chemical Treatment of Water, July, 1915, pp. 7.  
 Publication 145, Typhoid, July, 1915, leaflet.  
 Publication 146, Pellagra, July, 1915, leaflet.  
 Publication 147, The Sanitary Privy, July, 1915, leaflet.  
 Publication 148, Whooping Cough, July, 1915, leaflet.  
 Publication 149, Flies, July, 1915, leaflet.  
 Publication 150, Malaria, July, 1915, leaflet.  
 Publication 151, Measles, August, 1915, pp. 18.  
 Publication 152, Save the Babies, October, 1915, pp. 19.  
 Publication 153, Home Sanitation, January, 1915, pp. 20.  
 Publication 155, Demonstration Train of the State Board of Health, January, 1915, folder.  
 Publication 157, How to Test Cattle for Tuberculosis, April, 1916, pp. 8.  
 Publication 158, Malaria, April, 1916, pp. 4.  
 Publication 159, Some Poultry Pests, April, 1916, pp. 10.  
 Publication 160, Annual Report State Board of Health of Florida, April, 1916, pp. 256.  
 Publication 161, A Model Sewage Disposal Plant for a Rural Dwelling, Reprint Vol. XI, No. 3, March, 1916 Health Notes, pp. 6 (illustrated).  
 Publication 162, Tick Eradication, Reprint Vol. XI, No. 3, March, 1916, Health Notes, pp. 14.  
 Publication 163, Hog Cholera, pp. 30.  
 Publication 164, Annual Report of Veterinary Department, 1915, Reprint from 27th Annual Report of the State Board of Health, April, 1916, pp. 56.  
 Publication 165, Annual Report of Crippled Children Treatment, 1915, Reprint from 27th Annual Report State Board of Health, April, 1916, pp. 6, illustrated.  
 Publication 166, Vital Statistics, 1915, Reprint from June, 1916, Health Notes, pp. 44.  
 Publication 167, What You Should Know About Tuberculosis, Aug., 1916, pp. 32.  
 Publication 168, "A Health Sermon," Reprint from June, 1916, Health Notes, pp. 6.  
 Publication 169, "Sterilization of Water," Reprint from Oct. 1916, Health Notes, pp. 5.



## FEEDING THE GROWING CHILD

Much of the illness and suffering among babies commonly attributed to the "second summer" or to teething is actually due to errors in feeding. The baby's delicate digestive mechanism, accustomed to dealing only with milk, can not all at once undertake the task of adjustment to a varied diet of solid foods, but must be strengthened by the gradual addition of new foods until the organs are trained to more complicated operations. The safe rule for feeding the baby is to add but one new food at a time to his dietary to watch carefully the effect of each one and to withdraw it and return to the simpler diet at the first sign of trouble. These rules are particularly important in summer, when a baby is more readily upset.

The following list shows the day's meals for a baby in his second year:

- 7 a. m. Milk  
Zwieback, toast, or dried bread
- 9 a. m. Orange juice
- 10 a. m. Cereal  
Cup of milk
- 2 p. m. Broth  
Meat  
Vegetable  
Stale bread  
Baked apple
- 6 p. m. Cereal  
Milk  
Toast or bread
- 10 p. m. Milk (may be omitted)

**MILK**—At this time the baby should be taking about one quart of milk in 24 hours; part of this may be poured over the cereal.

**CEREALS**—Oatmeal should be cooked three hours, with a little salt in the water. It should be served without sugar or with a very little only. The lighter cereals should be cooked at least an hour.

**BREADS**—Bread for young children must have been thoroughly baked and should be quite dry when used, that is at least two days old. Tender toast is made by cutting thin slices from such a loaf and allowing them to dry still more, then toasting them to a delicate brown over a quick fire. Toast thus made is crisp all the way through and may be used in many ways. Many children will like to eat it broken into bits in broth or milk. Hot breads and biscuits, griddle cakes, and muffins are not suitable for your children.

**FRUIT**—The child may have a small portion of baked apple or prunes one a day in addition to this morning feeding of orange juice. The apple should be baked very tender, and all the skin, seeds, and hard parts should be removed. Prunes should be very carefully washed, soaked all night, then cooked until very tender with very little sugar. A small portion of the strained pulp may be given instead of apple, and the juice may be used also.

**MEAT**—The child may have about a tablespoonful of scraped meat, or a soft boiled or coddled egg once a day. Beef, broiled, boiled, or roasted, the tender part of a lamb chop, or the delicate meat of chicken or fish may be used. All meat should be scraped or minced very fine, as no child of this age can be trusted to chew it properly.

**VEGETABLES**—A small portion of some properly cooked green vegetable like spinach or tender string beans may be given. Such vegetables should be fresh. They should be cooked, then drained and mashed or strained through a colander.

At the beginning of the third year the child's diet may be increased by adding more solid food, especially meats and vegetables. According to the U. S. Department of Agriculture every healthy child of three should have at least one food a day from each of the following five groups:

1. Milk and dishes made chiefly of milk (most important of this group in children's diet); meat, fish, poultry, and eggs.
2. Bread and other cereal foods.
3. Butter and other wholesome fats.
4. Vegetables and fruits.
5. Simple sweets.

The meats should be beef, boiled, broiled or roasted; lamb chops; the white meat of chicken; or delicate fish. All meat should be free from fat, gristle, or bone and finely minced when given to the child.

Eggs should be very soft boiled, coddled, or poached, or soft scrambled. Fried eggs should never be given to a child; but the grated or mashed yoke of a very hard boiled egg may sometimes be used.

Meat broths made from mutton, beef, or chicken have little nutriment, but if these are thickened with arrowroot or corn starch, and especially if milk is added, they become a valuable food. Well-cooked vegetables, strained and added to warm milk, are not only good foods but serve to teach the child to like vegetables.

Cereals should be thoroughly cooked and served with milk or thin cream and a very small amount of sugar or none.

Bread for a child should be at least two days old. Toast, zwieback, or hard crackers may be given once or twice a day.

Baked potatoes moistened with a little butter, thin cream, beef juice, or platter gravy may be given.

Asparagus tips, spinach, stewed celery, squash, string beans, carrots, young peas, well-cooked and mashed, or put through a puree sieve, are all good for a child. A small portion of one of these vegetables may be a part of the child's dinner each day.

Fruits should be continually used. At this age sweet oranges, baked apples, or stewed prunes are most useful. The juice or mashed pulp of fresh ripe pears or peaches may be given in the third year, but there is much danger in using overripe or green fruit, as well as in giving too much. It is especially necessary to be careful in hot weather when fresh fruit decays rapidly. Bananas should never be given to a young child.

A child under 4 years of age should never have dried or salted meats, sausage, pork, game, liver, kidney, goose, or duck. Fried and

raw vegetables, hot fresh breads, cakes and pastries, salads, candy, syrups, tea, coffee, beer, cider, and soda water are all unsuitable foods for a child.—*Press Service, Children's Bureau, U. S. Dep't of Labor.*

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### **SACRIFICED TO A FILTH DISEASE**

"He died of typhoid fever on the 14th of December, 1861"

To be the consort of a queen, to be beloved by her people both high and low, to be the real but unobserved adviser of the affairs of an empire, these are achievements worth while. To be cut off from all of them at the prime age of 42 by a wholly preventable disease seems wanton. "The good Prince" Albert, consort of Queen Victoria, patron of the arts and sciences, a skillful administrator and an upright man was sacrificed to a filth disease.

Typhoid fever is found only in man. It is caused by a short rod-shaped microscopic vegetable, which enters the body through the mouth and leaves it in human discharges to enter another human mouth to which it is carried by fingers, flies, fluids and food. It is essentially a disease of young adult life. Older people are less apt to have it, probably because they have suffered from an attack of the disease in their youth.

Typhoid fever is known by various names, "slow fever," "low fever," but whatever name it is called by it kills about 8% of those whom it attacks. A certain percentage of those who recover become carriers, that is, persons who though well excrete the organisms of the disease in their discharges. Carriers are largely responsible for the perpetuation of typhoid fever, but the installation of proper sewer systems which not only take away noxious wastes but also do not deposit them in some one else's water supply, the abolition of flies, cockroaches, and other filth insects, the maintenance of a pure food supply, and the intelligent care of the typhoid patient, these are the measures which will rid us from this disease. Until very recently typhoid has been the scourge of armies but now the anti-typhoid inoculation has reduced this danger to a minimum.

The Prince-Consort was universally mourned. The grief of the queen was deep and lasting and the whole nation sympathized in the truest sense with her in her sorrow. How many other widows of less exalted position mourn also because of the rapacity of typhoid fever?

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### **NATIONAL BOARD OF MEDICAL EXAMINERS TO HOLD EXAMINATION**

The second examination to be given by the National Board of Medical Examiners will be held in Washington, D. C., June 13, 1917. The examination will last about one week.

The following states will recognize the certificate of the National Board: Colorado, Delaware, Idaho, Iowa, Kentucky, Maryland, North

Carolina, New Hampshire, North Dakota and Pennsylvania. Favorable legislation is now pending in twelve of the remaining states.

A successful applicant may enter the Reserve Corps of either the Army or Navy without further professional examination, if their examination papers are satisfactory to a Board of Examiners of these Services.

The certificate of the National Board will be accepted as qualification for admittance into the Graduate School of the University of Minnesota, including the Mayo Foundation.

Application blanks and further information may be obtained from the Secretary Dr. J. S. Rodman, 216 Walnut Street, Philadelphia.

### **EXPERIMENTAL STUDIES WITH MUSCICIDES AND OTHER FLY-DESTROYING AGENCIES**

Earle B. Phelps and Albert F. Stevenson, Hygienic Laboratory Bulletin, No. 108, December, 1915

After describing the methods of their technique and the results in using poisonous and sticky fly destroying agencies they come to the following conclusions:

The use of muscicides or fly poisons has many distinct advantages of combating the fly nuisance within the housefold. A serious drawback has been the extremely poisonous character of these substances and the danger, especially to children, attending their use.

Potassium dichromate and quassia syrup are of little value.

Formaldehyde, 0.5 to 1 per cent, equivalent to 1.25 to 2.5 per cent of 40 per cent solution sold as formalin was found to be more efficient than the standard arsenite solution.

A 1 per cent aqueous solution of sodium salicylate is almost as efficient as the formaldehyde solution.

At midsummer temperature the efficiency of these solutions is slightly greater than solutions made from commercial poison papers.

### **EXPERIMENTAL CONVICT ROAD CAMP**

By George D. Steele, Eng. Record, Vol. 75, No. 7, Page 250

The problem of labor camp sanitation has for some time past been of growing importance and sanitarians will therefore welcome the article by Mr. Steele.

Aside from the impressive economic points brought out in handling convict labor, the sanitary condition prevailing at this camp in Seaborn County Georgia, is equally as impressive and important to those of the medical profession having similar institutions under their care.

The average population of the camp has been forty men convicts since January 10, 1916; three-tenths of one per cent have had to have medical attention. Undoubtedly this is due to the excellent sanitary conditions prevailing.



The key note of the camp is sanitation and comfort. The buildings were designed with this in view and the discipline was carried out with the same end in mind. The results were successful, both from a health and economic standpoint.

### WHAT AILS COUNTRY CHILDREN?

There is a story told that there is more fresh air in the country than any where else for the reason that all the bad air stays shut up in the farmer's homes and the country school houses. We of the country would deny the charge, says the State Board of Health, but for the facts and figures that prove that ventilation in the country is sadly neglected. We are confronted everywhere with the undeniable facts that respiratory diseases, those that depend largely on fresh air both for their prevention and cure, which may be mentioned as tuberculosis, grippe, bronchitis and colds, as well as adenoids and defects of the nose and throat, are more prevalent in the country than they are in town. The figures gathered from medical school inspection work in both the rural and city schools show that country children are from .34 to 14.2 per cent more unhealthy than city children, even than children of the slums.

These facts brought to light regarding health conditions in the country are hard to accept and they should not be accepted for long, says the Board. The country where health conditions should be ideal, where fresh air is everywhere, except perhaps in the homes, and where space is free and exercise plentiful, should be made to yield healthy men and women.

Besides foul air, overcrowding is said to be another unexpected, un-called-for condition often met in the country. Investigations have shown that four, five and six people sleeping in one room which probably had only one window or perhaps two with neither one open, was not an uncommon occurrence. It is no wonder then that when slum conditions exist in the free wide-open-spaced country that health conditions will be no better or not as good as they are in the slums.—*Press Service, North Carolina State Board of Health.*

## Health Briefs

(Buffalo Sanitary Bulletin)

Flyless towns have few funerals.

Springtime. Clean up! Paint up! Scrub up!

He who doctors himself has a fool for a doctor.

Sickness is usually the result of somebody's neglect.

Nature imposes a penalty for every violation of her laws.

A good school motto: "We come to our tasks as we come to our sports."

The fly is crafty and alert; he carries germs and also dirt. KILL HIM!

Taking medicine, unless it is prescribed by a physician, is like fooling with a loaded gun.

Preventive measures have cut the death rate from typhoid fever in the United States in half since 1900.

"Fresh Air Freshmen" are the best kind of freshmen for any school. No need of watching that class.

No, I will not vaccinate, cried old Mr. Shallowplate. Though I had the chickenpox, now I'm shaking pesthouse locks.

The child or adult who eats whatever he likes, whenever he likes and as much as he likes will never be worth much, physically or mentally.

If you cannot join a walking club, become a walking individual. There's nothing to stop you from walking to and from your daily calling.

Keep well. The healthy body resists infection. Good food and good habits are most essential. Resistance may be broken down by weakening influences.

## Sanitary Engineering Notes

During the month of March the activities of the Engineering Department were conducted in the following cities and towns:

1. Jasper
2. Mulberry
3. Plant City
4. Palm Beach
5. West Palm Beach
6. Moore Haven

At Jasper the city council was addressed relative to sewage disposal and certain recommendations made.

At Mulberry a sanitary survey was conducted into general conditions—water supply, sewerage, sewage disposal, privies, refuse removal. Sanitary chemical and bacteriological examinations were made upon the water supply, also upon the sewage. An efficient study was made of the Imhoff tank and its workings.

At Plant City a general sanitary survey was instituted into water supply, sewerage, sewage disposal and privy construction. Efficiency studies were also conducted on the workings of the Imhoff tanks.

At Palm Beach conditions relative to refuse collection and disposal were advised upon. The disposal methods in vogue at one or two hotels were condemned and recommendations made concerning improvements and new installations. The city council of Palm Beach was addressed upon the necessity of an incinerator to care for the garbage production, which was now being loosely cared for by each individual.

At West Palm Beach general sanitary conditions were investigated, the water supply, water chlorination, sewerage system and refuse collection and disposal. A recommendation was promulgated relative to the construction of an intercepting sewer along Lake Worth to eliminate the several outlet sewers now used. A sewage disposal plant may also be required later.

At Moore Haven sanitary conditions and the control of typhoid fever were investigated.

During the month numerous samples of both water and sewage were examined and several recommendations made pertaining to new sewage disposal works.

### TO AVOID TYPHOID FEVER

Typhoid fever can be avoided. There has been no typhoid fever in the United States Army for almost five years. The armies of Western Europe, applying methods first worked with complete success in the United States, have been relatively free from typhoid. They have had some typhoid, but less than any army in times of war in history, except it be the Japanese army in the Russo-Japanese war. The soldiers in the mud and slime of the trenches of Western Europe

are freer from typhoid than are the millionaires who live on American boulevards.

The most valuable method of protection against typhoid is vaccination. Vaccination against typhoid consists in three hypodermic injections of a prepared vaccine. These injections are given at intervals of 10 days 20 days elapsing between the first and last vaccination. The arm does not get sore, as in smallpox vaccination. The amount of fever and aching is less than in the case of smallpox vaccination.

It is a little early to say how long a vaccinated person is protected against typhoid, but the general opinion is that protection lasts three years.

Who should be vaccinated? Nurses and doctors in general hospitals. Drummers and railroad men. All who travel much. All people who live in towns and small cities, people who live in the country. People who live in cities or sections of cities where typhoid is epidemic. For instance, those in Milwaukee should be vaccinated, likewise everybody living on the south side in Chicago. All people who live in cities where the typhoid rate is over 30.

To prevent infection by infected water most cities make use of chlorination. Sometimes the chlorine is used as chlorinated lime and sometimes as liquid chlorine. If a man lives in a town where the water is polluted and the authorities do not chlorinate he can chlorinate himself.

Soldiers on the march sometimes make use of a small chlorination tank. A man can chlorinate a bucket of water or a wellful, if he chooses. The ordinary method of purifying water is by heating. The common injunction is to "boil the water." Boiling kills the typhoid bacilli. It also drives off the gas and makes the water flat and tasteless. It is not necessary to boil water to kill typhoid bacilli. One hundred and fifty degrees for 30 minutes will kill them. If water is heated until bubbles begin to form on the side of the vessel and then set in the warm stove for 15 minutes the typhoid bacilli will be killed and the water will not taste cooked.

Whenever there is much water-borne typhoid there will be an increase of milk and vegetable-borne typhoid. Commercial pasteurization, as it is done in cities with milk inspectors, will protect the milk against typhoid. Where raw milk is used or the pasteurization is not supervised the milk should be pasteurized in the home. Vegetables and fruits which are eaten raw are sources of danger whenever typhoid is widespread in a community. Cooked vegetables, cooked fruits, and raw fruits of the heavy peel varieties are safe.

In times of typhoid epidemic efforts to keep the hands clean should be redoubled. Finger typhoid always increases when there is a great increase in typhoid in the community.

Typhoid can be avoided. But vigilance is the cost and one must pay.

## Correspondence

### NO MEDICINE FOR CONSUMPTION

Dr. Joseph Y. Porter, State Health Officer, Jacksonville, Fla.

Dear Doctor: I write to you for information. My husband has consumption and we are not able to buy the medicine that we need and will the State Board of Health help us to obtain the medicine for him? He has been down since December 25th, 1916. If you cannot help us tell us the name of the medicine that will cure him.

Yours very truly,

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Jacksonville, Fla., March 15th, 1917.

Dear Madam: Replying to your letter of the 11th, I regret to inform you that there is no medicine that is a cure for tuberculosis. The proper method of treatment is plenty of fresh air both day and night, and good nourishing food, milk, eggs, and juicy meat.

The outdoor treatment of tuberculosis is the only successful one to pursue, combined with the nourishing food.

Regretting that I am unable to be of more assistance to you, I am,

Yours very truly,

(Signed) Joseph Y. Porter, State Health Officer.

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### BITTEN BY DOG

Dr. Joseph Y. Porter, Jacksonville, Fla.

Dear Sir: Last September my little boy of seven years, was bitten by a dog. The foot was considerably swollen and very painful. Our doctor attended the child and the wound healed in about a week. His blood was not in good condition at the time. The dog has shown no signs of being mad or even ill at the time. I asked the authorities to have him muzzled, but he still runs at large, is often in our yard, as his owner lives just across the street from us. Is there any possible chance of harm coming to the boy from the bite? Please set my mind at rest on the matter.

By answering this question you will greatly oblige,

Yours respectfully,

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Jacksonville, Fla., March 12th, 1917.

Dear Madam:

Replying to your letter of March 9th you are advised that from what you say in your letter, there is no possible chance of your boy contracting hydrophobia from the dog bite which he received. I note that he was bitten last September and that the dog which bit him is still alive. Had the dog been suffering with rabies he would have died within five or six days. The fact that the dog is living at the present time denotes that the dog was vicious but not mad.

Yours very truly,

(Signed) Joseph Y. Porter, State Health Officer.



**THINKS WIFE HAS TUBERCULOSIS**

Dr. Joseph Y. Porter, State Health Officer.

Dear Sir: Some people seem to think my wife has tuberculosis. If I carry her to Jacksonville will the State Board of Health examine her? If this is correct I want to do something to check it. Please advise by return mail.

Yours very truly,

Jacksonville, Fla., March 15th, 1917.

Dear Sir: Replying to your letter of the 14th, I wish to say that the State Board of Health laboratory will make an examination of sputum for determining the presence of tubercule bacilli, in order to ascertain if your wife has tuberculosis of the lungs, but physical examinations are not made here. You should have your family physician make a thorough physical examination of your wife, and if she has a cough, you may also submit a specimen of sputum to our laboratory for examination. Under separate cover I am sending you a container for this purpose. Please read the instructions carefully, and fill out the blank completely with the required information, in order that the laboratory may be able to make an intelligent report by having the necessary data at hand.

However, you should not depend upon this laboratory examination alone, for often a person may be suffering with the malady and the sputum not show it, when a clinical examination will, and steps can therefore be taken to arrest the disease before it has gone too far. On the other hand, even if the sputum does show positive, there is no reason why the patient should be discouraged for when the treatment is undertaken in the early stages of the disease, there is no reason to doubt recovery will follow. You know, of course, that the open air treatment is the only method to pursue in these cases. Plenty of good fresh, air both day and night, and good nourishing food, and plenty of it; milk, eggs and tender juicy meat. However, as I stated above, you should consult your family physician with reference to your wife's health.

Very truly yours,  
(Signed) Joseph Y. Porter, State Health Officer.

**SAWDUST FILL**

State Board of Health, Jacksonville, Florida.

Dear Sirs: We have a saw mill located here in town and the sawdust is being placed in a low bottom place that will hold water during rainy season. It is a question whether this will cause sickness or not. Will you kindly advise me by return mail as we are anxious to take some action in the matter.

Thanking you in advance, I am,

Yours very truly,

Jacksonville, Fla., March 16th, 1917.

Dear Doctor: Replying to your letter of the 14th, relative to the matter of sawdust from a mill located in your town, being placed in a low bottom place, causing sickness, I wish to advise that this will in no way affect the health of your community, unless the water stands in this place and furnishes a breeding place for mosquitoes. In fact it would seem that by filling up the depression it would do away with this very danger of mosquito breeding, since it would no longer furnish a receptacle for stagnant water.

Thanking you for writing, and assuring you of any further advise or assistance that I may be in a position to render you, I am,

Yours very truly,  
(Signed) Joseph Y. Porter, State Health Officer.

## Press Comment

### THE ARCADIA ENTERPRISE AND THE STATE BOARD OF HEALTH

Of late the Arcadia Enterprise has been pouring some hot shot language, —no facts however—into the State Health Department, and has made Dr. Porter its special target for virulent assault.

It appears that the principal causes of Brother Carter's mental indigestion are the tax for the support of the board, and the existence of medical fakirs and quacks in the State. We do not believe that Dr. Porter is responsible in any way for these "bug-a-boos," but to make sure of our position we wrote to him asking the question. This is what he writes us. He writes at length which we condense:

"The tax of half mill on the assessable, collectable, property of the State was established when the act creating the State Board of Health was passed in the called session of 1899. For the year 1899 fifty thousand dollars was appropriated, but of that amount only eleven thousand dollars was spent. The next year no levy was made at all, and subsequently in the administration of Governor Mitchell, only a quarter of a mill was assessed, for at that time it was discretionary with the Governor to levy not exceeding one-half mill tax.

"In subsequent years the increase of smallpox which the Board under the law was compelled to take care of because the people had a prejudice against vaccination,—and other conditions, used up all the funds of the Board, and in 1899, when yellow fever was introduced from Havana into Key West and from Key West into Miami, the treasury of the board became exhausted. Fortunately, Governor Bloxham was the executive of the State at that period, and with that broad-minded conception of duty and appreciation of conditions that always characterized the man, authorized a temporary transfer of funds to meet the emergency, which, with the generosity unparalleled of Mr. Flagler, who wired Mr. Parrott to say to the State Health Officer to draw on him for whatever funds he might need in Miami. The exigencies of that occasion and incident were so successfully met, that yellow fever never passed from the city limits of Miami.

"At a subsequent session of the legislature a bill was passed, at the instance of Dr. John C. L'Engle, then a member of the lower branch of the legislature from Duval County, which made the tax for the support of the State Board of Health mandatory at one-half mill, and not discretionary, as heretofore. With the added burdens placed on the State Board of Health by following legislatures the expenses of management have naturally increased and the total expenditure each year have mounted to a large sum. This is all explained in the Annual Report of the Board last year, and more especially and in detail statement this year. It is a patent fact, however, and a matter of record, that the State Health Officer has never asked for an increase in this tax, nor has he ever asked for an increase in his own salary, although several times his friends have proposed an increase which he discouraged, and which was, at his instance never brought to the attention of the law-making power.

"Now about 'running out' the fakirs and medical quacks, which the Arcadia Enterprise thinks should have been the duty and principal effort of the State Health Officer before the Florida Legislature.

"The Florida Legislature has never conferred powers to regulate the practice of medicine on the State Board of Health, so like the man who became wealthy by attending to his own business because he had so little competition, the State Board of Health has made a success of its work in confining its activities strictly to prevention of disease, lessening sickness and increasing the health betterment of the people."

We hope, Brother Carter, that you have been answered, since you asked why Dr. Porter did not "drive out fakirs and quacks" from the State. Prob-

ably, if he had been given the authority, he would have done so, for you must concede, if you are at all fair-minded, that he has done so for yellow fever, and decreased the prevalence of other disease.

There are some States in the Union which make the State Board of Health the examining and licensing board for the practice of medicine, and it is just possible that you have confounded Florida with those states. All of which goes to show that one should not discuss subjects unless fully informed.

As we said in another article, change your gears, Brother Carter. Slow down when you are going around a curve of "supposition" inspired by prejudice, lest you lose control of your machine—your brain—and run disastrously against a bank of established and recorded facts which will smash all of your imagined hypotheses.—Florida Record.

### EXCEEDING THE SPEED LIMIT OF COMMON SENSE

The Governor of Florida, through a new board of health can appoint another officer, but can he offer a new man the confidence of the national board of health?—Times-Union.

He can-not. Dr. Porter should be re-appointed.—Tampa Times.

What the deuce do we care about the confidence of the national board of health if we can't have it and at the same time run our own business? Let the national board of health be dashed, if it don't like our style. The old argument is threadbare and reminds us of Uncle Steve's campaign. Just let the national board of health conduct itself so as to retain OUR confidence and it will come up to all that is required of it, without nosing into political affairs of our state.—Arcadia Enterprise.

Not so fast Brother Carter, not so fast. Change your gears and get down into first speed and listen. The Enterprise reminds us of the day of the man who said there were eleven damphools on the jury with him, not thinking, that he himself might be the damphool. "Let the National Board conduct itself so as to retain our confidence," you say: It is a pity that so many papers in this State have to become correctors of some of your foolish thunder against the present State health management. But it seems that we will have to get your carburetor properly adjusted, so that your "think-tank" on this subject may run smoothly again.

Did you know that in 1901 the Legislature of Florida sold the quarantine stations of the State to the National Government? No we don't believe that you ever did, else you would not have made such an unthinking remark as you have. A State health officer who has the confidence of the National Board of Health, because of long association and because he was formerly a member of that service—one who is affiliated with the medical profession of the State, the nation in its various societies, American Medical, Public Health, Anti-tuberculosis, and many others it stands to reason of all intelligent and thinking people, that the National Board of Health will have greater confidence in him than an untried and inexperienced man.

The Tampa-Times is right, Brother Carter. Now shift your gears again and strike the right speed. We have tried to adjust your carburetor of reason, if it is not flooded by prejudice.—Florida Record.

## Veterinary Notes

### NEEDED LEGISLATION IN FLORIDA

By W. F. Blackman, President of the Florida Live Stock Association

We have now reached a point in the development of the livestock industry in Florida when new legislation is demanded. I believe that this Association should formulate its views on this matter, and use every legitimate effort to secure the enactment of these views into law by the Legislature which will meet next April. I shall therefore present for your consideration two propositions:

1. That there should be created in Florida a State Livestock Sanitary Board, with adequate powers; and
2. That a Statewide campaign for the eradication of the cattle tick, authorized and made mandatory by law, and supported by a sufficient appropriation of State and county funds, should be entered upon at once, in cooperation with the Federal Bureau of Animal Industry, and should be carried to completion in the shortest possible period of time.

All matters affecting the health of our live stock are at present cared for by the State Board of Health. And I hasten to say that the people of Florida have great confidence in the Board of Health, and with the best of reasons. It is admirably organized and officered; it is intelligent, broad-minded, energetic, and vigilant in the prosecution of its work. The State Health Officer, Dr. Joseph Y. Porter, and the Veterinarian of the Board, Dr. Charles F. Dawson, are men of thorough scientific and technical training, sound judgment and devotion to the public welfare. I am confident that our live stock operators fully recognize and gratefully appreciate the generous treatment accorded to its veterinary division by the Board of Health, as well as Dr. Dawson's capable, faithful, and efficient service. But in my judgment, the sole proper work of a State Board of Health is the sanitary care and defence of the human population of the State, and its attention should not be diverted in any measure from this noble and exacting task to the very different problems of animal sanitation and disease. For this service, a special board of five or seven members should be instituted, as far as possible dissociated from politics, every member of which should be either an expert in animal husbandry or else a practical and successful grower of livestock, financially interested in the business. The Commissioner of Agriculture and a representative of the College of Agriculture of the University of Florida should be exofficio members of this board, and perhaps the State Health Officer also, thus relating the Board officially and intimately to the Department of Agriculture, the University and Experiment Station, and the State Board of Health. The Commissioner of Agriculture should be Chairman, and the State Veterinarian, Secretary of the Board, and the members not otherwise employed and salaried by the State should, I believe, serve without pay other than a moderate per diem for expenses incurred in the service of the State. To this Board should be



transferred all the veterinary work of the State Board of Health and its Veterinarian.

And now let us recall the significant fact that Florida stands alone among all the States of the American Union in burdening its Board of Health with the duty of caring for animal sanitation. See how the matter stands with our sister States of the South. In Tennessee this work is devolved upon the Department of Agriculture; in Georgia, upon the State Veterinarian, who is attached to the Department of Agriculture; in North Carolina and Oklahoma, upon the Board of Agriculture; in Arkansas, upon the Board of Control of the Agricultural Experiment Station; in South Carolina, upon the Board of Trustees of Clemson Agricultural College (apparently); in Texas, upon the Livestock Sanitary Commission; and in Alabama, Mississippi and Louisiana, upon the Livestock Sanitary Board. Have we greater wisdom in Florida than all our neighbors, that we should care for this vital concern in a manner not followed by any other commonwealth? Is not the fact that the judgment and the experience of all the other states of the Union, without exception, are against us in this matter worthy of very careful consideration by us? And can anyone give a single valid and cogent reason why we should longer continue a method of handling this matter which is wholly peculiar to ourselves and which, I will add, must have the appearance to outside observers of giving to our livestock interests a dependent and subordinate place on a Board which is properly organized and administered for quite different purposes?

And this brings up to two points of great importance; first, the stimulating effect which the creation and work of a vigorous Livestock Sanitary Board, made up of citizens well known throughout the State and of first-rate influence, would exert on the livestock industry within our borders. Would it not seem to our people to mark a turning-point, an epoch, in the development of this business, the importance of which for Florida we are now just beginning to realize? Would it not cause all concerned to "sit up and take notice?" Would it not suggest that all the people of the State speaking through the Legislature, are awakening to the opportunities which we in Florida have for developing an extensive and profitable industry in this line, and are proposing to stand solidly behind those who are engaging in it? Would it not greatly encourage the men who, amid many difficulties, are investing their money and their energies in the breeding, growing and marketing of livestock to a larger or smaller extent, and lead others to embark upon it? Would it not promote discussion and the fruitful interchange of views and experiences? Would it not have an influence upon the daily and weekly newspapers of the State? Would it not lead our bankers and other owners or administrators of capital to feel that there is a greater opportunity, and a greater stability and security, for investments in this business than they had supposed? Obviously, what may be called the psychological and moral effect of such legislation upon our own people would be considerable.

And in the second place, I can think of nothing, in the present sensitive state of the general American mind on the subject of meats, the growing of livestock, the exhaustion of ranges, and the enormous and



threatening increase in the cost of living—I can think of nothing just now which would be of greater value to Florida as an advertisement and an inducement to immigration than the establishment of the proposed Board, together with the discussions in the Legislature and in the agricultural and other powers of the country to which it would give rise.

So long as we alone, of all the states of the Union, leave the promotion of our livestock interests as in some degree a side-issue, so to say, to a Board organized in the main for another purpose, is this not tantamount to the admission by us, the naive but effective advertising to the world by us, that we ourselves regard the livestock business of Florida as so insignificant at present, and so unpromising for the future, that it does not deserve the separate recognition and fostering care which are accorded to it in other States?

Florida spends a vast sum each year in advertising her resources and attractions; here is a mode of advertising which is indirect (and all the more effective on that account), and which would find its way into the press of the country, and thus to the attention of those interested, without money and without price.

And so, the first proposition which I submit for your consideration is that there should be created in Florida by the incoming Legislature a STATE LIVESTOCK SANITARY BOARD, with adequate powers.

My second proposition relates to the matter of tick eradication in Florida.

It is not necessary for me to say anything after the addresses to which you have listened by Dr. Nighbert, Dr. Knapp and others, with regard to the immense damage and loss occasioned by the tick. I think I may assume that all the members of this Association are agreed that any such large and profitable cattle industry as we want to see developed in Florida, and as we believe may be developed here, is dependent before all things else on our ridding the State of this pernicious pest. And I suppose we are all agreed, too, even those of us who believe most in individual initiative, and distrust most the interference of law in private affairs, that the ticks can never be eradicated in Florida by the action of isolated individuals; the entire community, and the federal government as well, must be made to cooperate in the undertaking, if it is to succeed. And this can be done in only one way,—the passage of suitable and stringent laws by the Legislature.

But there are some people in Florida, I am sorry to say, who do not agree with the members of this Association with regard to these matters. Every few days I am told by cattlemen, and generally with a wise, sagacious dogmatic and somewhat pitying or else impatient and contemptuous air, as befits the practical man who is dealing with mere theorizers, that it is impossible to exterminate the tick under Florida conditions. The effort to do so would be like "looking for a needle in a haystack," they say; the range is too vast, the cattle too few, scattering itinerant. And so, I admit, it seems to us all at first thought. But let us remember after all that these objectors, who think themselves so "practical," are the theorizers, not we. Have they ever tried it? Do they speak from experience? No! Actual experience is all on our side; actual experi-

ence—abundant, almost unanimous, emphatic—affirms that the tick can be totally and finally exterminated over any area, under any conditions of farm or unfenced range, if the attempt to do so is intelligently organized, adequately and heartily supported by the people, and energetically prosecuted to the end by those in charge.

## Summary of Public Health Administration, February

### SOUTHWESTERN DISTRICT

Tampa: Routine work, office of the Assistant to the State Health Officer. Hillsborough County: Differential diagnosis suspected scarlet fever. Investigation cesspool Arlington Heights. Reinspection sanitary nuisance. Differential diagnosis suspected smallpox; patient removed to isolation hospital. Treatment of smallpox cases at isolation hospital. Inspection of city jail at Gary on complaint of citizens. Differential diagnosis smallpox in Tampa.

Seffner: Investigation sanitary nuisance.

### WESTERN DISTRICT

Pensacola: Routine work, office of Assistant to the State Health Officer. Management of communicable diseases, and supervision of inspections by sanitary patrolman.

### SOUTH EAST COAST DISTRICT

Key West: Routine work, office of Assistant to the State Health Officer. Routine laboratory work. Sixteen vaccinations against smallpox and three against typhoid performed. All complaints investigated and sanitary nuisances ordered abated. Communications sent County Solicitor and Sheriff calling attention to violations state sanitary statutes. Permits signed for transportation of corpses.

### SOUTH CENTRAL DISTRICT

(January and February)

Plant City: Routine office correspondence. Visit cases fever with attending physicians. Collection samples water for examination. Audiences with citizens on health matters. Conferences with officials on the enforcement of sanitary regulations.

Mt. Enon: Inspection suspected cases diphtheria with attending physician.

Youmans: Consultation, continued fever. Laboratory examination negative for malaria and typhoid.

West Polk County: Visit with attending physician to family infected with malaria.

Coronet: Consultation, three cases dysentery.

Springhead: Consultation, ileo-colitis.

Hopewell: Visit cases of ileo-colitis with attending physician.

Windermere: Sanitary inspection. Examination of suspected case typhoid. Collection of case record data, specimens of patient's blood and sample of drinking water.

Orlando: Sanitary inspection. Consultation with city health officer regarding more rigid enforcement of screening laws.

Mulberry: Investigation epidemic measles. Consultation with doctors and teacher. Sanitary inspection.

Lakeland: Routine visits. Consultations with health authorities.

Tampa: Frequent visits to laboratory for examination of specimens.

Trilby: Re-examination case poliomyelitis. Consultation with attending physician.

Haines City: Sanitary inspection.

Frostproof: Investigation case typhoid. Inspection of premises. Advice as to sanitary management of case. Consultation with attending physician. Collection of specimens.

Lake Wales: Conference with citizens on health matters. Inspection of food stall for enforcement of screening laws.

Dover: Visit rural case typhoid. Consultation with attending physician. Inspection of premises, advice concerning use of prophylactic, disinfection of fomites, etc.

Antioch: Consultation with attending physician on suspected case of typhoid fever. Collection of specimens. Usual advice along preventive lines.

Florence Villa: Accompanied Sanitary Engineer of State Board of Health on an inspection of hotel sewage disposal plant.

Winter Haven: Inspection of town for enforcement of screening laws. Inspection of public school. Accompanied Engineer on inspection of public utilities. Conference with citizens on health matters.

Tampa: Submission of specimens from suspected typhoid milk for analysis. Conferences with Assistant to State Health Officer of District and Bacteriologists on health matters.

Lakeland: Inspection of dairies and conferences with city health officer.

#### CENTRAL DISTRICT

Ocala: Routine work, office Assistant to the State Health Officer.

Chiefland: Investigation complaint about insanitary meat market.

Rochelle: Isolation case measles; talk with citizens regarding means to prevent spread of the disease.

Brooker: Consultation with local physician concerning outbreak of dysentery.

LaCrosse: Visited two families with amoebic dysentery; advice given regarding prevention and treatment.

#### NORTH CENTRAL DISTRICT

Live Oak: Routine office duties. Microscopical examination for local physicians. Lectures to high school on public health subjects.

Dowling Park: Investigation and management smallpox. (Two visits).

Pine Mt. Section: Diphtheria, 1 case; usual methods of control.

Mayo: Investigation reported anterior poliomyelitis.

Luraville: Investigation reported anterior poliomyelitis.

#### NORTH EAST COAST DISTRICT

St. Augustine: Routine work, office of Assistant to the State Health Officer.

#### WEST CENTRAL DISTRICT

Tallahassee: Routine work, office of Assistant to the State Health Officer. Antityphoid vaccine administered to 10 persons. Instructions given to families as to control of typhoid fever.

#### EDUCATIONAL HEALTH EXHIBIT TRAIN

Towns visited during February: Sanderson, Glen St. Mary, Macclenny, Baldwin, Lake City, White Springs, Jennings, Jasper, Pine Mount, O'Brien, Branford, Ft. White, High Springs, Clark, Newberry, Perry, Trenton, Archer. Number towns visited in 1917 to March 1..... 43

#### PUBLICITY AND PUBLICATIONS

Monthly bulletin "Health Notes," Vol. XII, No. 2, February, 1917, pp. 28.  
Press Service Bulletins to Florida newspapers: Feb. 7, "Measles;" Feb. 14, "Identification of Disease;" Feb. 21, "Conservation of Health;" Feb. 28, "Mosquitoes."

Publications out in February: No. 170, "Rules of the State Board of Health of Florida governing the Transportation of Dead Bodies," pp. 4. No. 171, "Rules and Regulations of the Florida State Board of Health Governing Morbidity Reports," pp. 4.

#### DISTRIBUTION OF LITERATURE DURING FEBRUARY

Mailed upon request and distributed in field.....	3,210
Press service bulletins to Florida newspapers, 4 issues.....	1,200
Health Notes, February, mailing list.....	10,700
Total number pieces distributed.....	15,110
Number pieces literature distributed in 1917 to March 1st.....	31,495

## SMALLPOX

Reported cases of smallpox in Florida, February, 1917:

Coleman, Sumter County.....	1
Dowling Park, Suwannee County.....	1
Venice, Manatee County.....	1
White Springs, Hamilton County.....	1

Total cases.....4  
 Total reported cases in 1917 to March 1.....6

## DISTRICT TUBERCULOSIS INSPECTION

Monthly Report, Status of Tuberculosis District Nursing, Month Ended Feb. 28, 1917

<i>Residence of Cases Visited to Date by Districts</i>	<i>Total Number of Cases Under Instruction Last Report</i>	<i>New Cases Found Month Ended</i>	<i>Cases Found to Have Died</i>	<i>Cases Removed</i>	<i>Cases Apparently Cured</i>	<i>Total Number of Cases in District Under Instruction to Date</i>	<i>Total Number of Cases Following Instruction</i>
District No. 1.....	62	2	2	2	..	60	49
District No. 2.....	48	..	..	..	..	48	25
District No. 3.....	155	..	..	..	..	155	107
District No. 4.....	74	..	..	..	..	74	64
District No. 5.....	149	6	6	2	..	147	98
District No. 6.....	219	6	..	..	..	225	170
District No. 7.....	32	3	1	1	2	31	31
District No. 8.....	111	2	1	3	2	107	47
District No. 9.....	165	15	2	2	1	175	175
District No. 10.....	161	12	..	3	..	170	75
District No. 11.....	111	2	1	..	..	112	79
District No. 12.....	208	28	6	..	..	230	229
Colored Nurse, State at							
Large.....	148	21	..	..	..	169	144
	1,643	97	19	13	5	1,703	1,293



## BIOLOGICAL PRODUCTS

Distribution of Biological Products during February (anti-rabic vaccine, diphtheria and tetanus antitoxin free to indigent only.) Number of persons receiving treatment:

<i>County and Town</i>	<i>Anti-Smallpox Vaccine</i>	<i>Anti-Rabic Vaccine</i>	<i>Anti-Typhoid Vaccine</i>	<i>Diphtheria Antitoxin Curative and Immunizing</i>	<i>Tetanus Antitoxin Immunizing</i>
ALACHUA					
Gainesville .....	..	..	..	3	..
DADE					
Miami .....	..	..	1	..	..
DUVAL					
Jacksonville .....	4	7	22	3	..
ESCAMBIA					
Pine Barren .....	..	..	2	..	..
FRANKLIN					
Apalachicola .....	10	..	..	..	..
GADSDEN					
Chattahoochee .....	30	..	..	..	..
Havana .....	..	1	..	..	..
HERNANDO					
Brooksville .....	..	1	..	..	..
HILLSBOROUGH					
Plant City .....	..	..	2	..	..
Tampa .....	..	..	..	2	..
JACKSON					
Cottondale .....	..	1	..	..	..
JEFFERSON					
Metcalf, Ga. ....	..	2	..	..	..
Lamont .....	..	1	..	..	..
LEON					
Tallahassee .....	60	..	2	..	..
MADISON					
Madison .....	..	1	..	..	..
MARION					
Ocala .....	10	..	..	..	..
MONROE					
Key West .....	30	..	..	1	..
SEMINOLE					
Sanford .....	10	..	..	..	..
ST. LUCIE					
Sebastian .....	10	..	..	..	..
SUMTER					
Coleman .....	30	..	..	..	..
SUWANNEE					
Live Oak .....	..	..	..	2	..
VOLUSIA					
DeLand .....	10	..	..	..	..
WASHINGTON					
Chipley .....	..	1	..	..	..
Total.....	204	15	29	11	..

Total number persons receiving anti-smallpox vaccine in 1917 to March 1st.....354  
 Total number persons receiving Pasteur Treatment in 1917 to March 1st.....24  
 Total number persons receiving anti-typhoid vaccine in 1917 to March 1st.....125  
 Total number persons receiving diphtheria antitoxin in 1917 to March 1st.....54  
 Total number persons receiving tetanus antitoxin in 1917 to March 1st.....6

## CRIPPLED CHILDREN

NAMES								Operating, Plaster Work, Special Treatment, Etc.	Date Discharged and Condition	Diagnosis	Under Treatment 2-28-17
	In St. Lukes 1-31-17	In Brewster (Col.)	Outside Treatment	Applications Received	Admitted St. Lukes	Admitted Brewster	Admitted for Office Treatment Examined, Not Admitted	Total Cases During Month			
C. B.	1	..	..	..	..	..	..	Massage & exercise	.....	Volkman's contracture..	1
W. D.	1	..	..	..	..	..	..	Dressings .....	2-28, Cured	Osteomyelitis Femur....	..
O. D.	1	..	..	..	..	..	..	Op. 2-23, Dissecting out sinus kidney region .....	.....	Perinephritic Abscess...	1
G. G.	1	..	..	..	..	..	..	Daily Dressings....	2-19, Cured	Club Foot.....	..
W. L.	1	..	..	..	..	..	..	Op. 2-5-17, Osteo- myelitis Dorsal spine .....	.....	Osteomyelitis, spinous and transverse process 12th dorsal v.....	1
H. M.	1	..	..	..	..	..	..	Electric light treat- ment of wounds. ....	.....	T. B. Hip and Sacrum	1
A. T.	1	..	..	..	..	..	..	Electric light treat- ment of wounds. ....	.....	Osteomyelitis, Tibia.....	1
F. R.	1	..	..	..	..	..	..	Electric light treat- ment of wounds. ....	.....	T. B. Hip.....	1
I. P.	1	..	..	..	..	..	..	Op. 2-6, Cureting Sinuses.....	.....	Osteomyelitis, Tibia.....	1
R. W.	1	..	..	..	..	..	..	Massage & exercise	.....	Spastic Paralysis.....	1
A. B.	..	..	..	1	..	..	..	Plaster Corset 2-12	.....	Poliomyelitis, paralysis..	1
M. B.	..	..	..	2-7-17	1	..	..	Massage & exercise	.....	Club Foot.....	1
M. P.	1	..	..	2-8-17	..	..	..	Op. 2-10-17, Club Foot, Cast 2-20..	.....	Lateral Curvature of Spine.....	1
								Exercise .....	.....		1
Total	12	..	..	2	..	..	..	4 Operations 2 Casts	2		12

BACTERIOLOGICAL LABORATORIES  
SPECIMEN EXAMINATION

	Jacksonville	Tampa	Pensacola	Miami	Key West	Tallahassee	Total
Animal Parasites.....	206	71	30	11	3	25	346
Diphtheria .....	230	67	36	8	2	4	347
Gonorrhoea .....	82	42	47	20	3	8	202
Malaria .....	124	101	29	22	2	56	334
Pathological Ex. ....	..	8	..	7	..	..	15
Rabies .....	15	..	1	..	..	..	16
Tuberculosis .....	160	66	39	23	..	13	301
Typhoid .....	146	87	28	24	..	24	309
Water: Bacterial Ex.....	..	..	..	21	3	..	24
Wasserman .....	308	115	..	..	..	..	423
Miscellaneous .....	24	38	13	46	6	42	169
	1,295	595	223	182	19	172	2,486

Total number of specimens examined in the State Board of Health Laboratories during  
February, 1917.....2,486

DISTRIBUTION OF DISEASES DETERMINED BY BACTERIOLOGICAL  
LABORATORIES, FEBRUARY, 1917

## (MALARIA)

TOWN	Diphtheria	Gonorrhea	Esivocautummal	Quarant	Tertian	Species not Determined	Typhoid	Tuberculosis	Uncinaria	Ascaris	Trichurias	Tapeworm	Rabies	Wassermann	Oxyuris
Apalachicola	..	..	..	..	..	..	1	2	1	..	..	..	..	..	..
Archer	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..
Avon Park	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..
Bagdad	..	..	..	..	..	..	1	1	..	..	..	..	..	..	..
Bartow	..	..	..	..	..	..	1	1	..	..	..	..	..	..	..
Bowling Green	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..
Boynton	..	..	..	..	..	..	1	1	..	..	..	..	..	..	..
Bradentown	..	..	..	..	..	..	..	2	..	..	..	1	..	..	..
Brooksville	..	1	..	..	..	..	..	..	1	..	..	..	..	..	..
Campbellton	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..
Carrabelle	..	..	1	..	3	..	..	1	..	..	..	..	..	..	..
Center Hill	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..
Century	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..
Chattahoochee	..	..	..	..	..	..	..	..	..	..	..	..	..	9	..
Chipley	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..
Cottondale	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..
Dade City	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..
Daytona	1	2	..	..	..	..	6	..	..	..	..	..	..	..	..
Daytona Beach	1	..	..	..	..	..	1	..	..	..	..	..	..	..	..
DeLeon Springs	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..
Delray	2	..	..	..	..	..	..	3	..	..	..	..	..	..	..
Dowling Park	1	..	..	..	..	..	2	..	..	..	..	..	..	..	..
Fellsmere	..	..	..	..	..	..	..	10	..	..	..	..	..	..	..
Ft. Barrancas	..	..	..	..	..	..	1	1	..	..	..	..	..	..	..
Ft. Lauderdale	1	..	..	..	..	..	1	..	..	..	..	..	..	..	..
Ft. Meade	..	..	..	..	..	..	..	2	..	..	..	..	..	..	..
Ft. Meyers	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
Ft. Pierce	2	..	..	..	..	..	1	1	..	..	..	..	..	..	..
Gainesville	..	..	..	..	..	..	2	..	..	..	..	..	..	..	..
Garniers	..	..	..	..	..	..	..	4	..	..	..	..	..	..	..
Grandin	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..
Green Cove Springs	1	..	..	..	..	..	..	1	..	1	..	..	..	..	..
Greenville	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..
Groveland	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..
Havana	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..
Hawks Park	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..
Jacksonville	9	14	..	..	2	..	6	13	18	2	1	2	5	61	1
" Release Cult.	10	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Kissimmee	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..
Key West	1	..	..	1	..	..	1	..	..	..	..	..	..	..	..
Lakeland	..	..	..	..	..	..	2	..	..	..	..	..	..	..	..
Lamont	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..
Larkin	..	..	..	..	..	..	..	2	..	..	..	..	..	..	..
Largo	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..
Laurel Hill	1	..	..	1	..	..	..	1	1	..	..	..	..	..	..
Leesburg	..	..	..	..	..	..	1	1	..	..	..	..	..	..	..
Lulu	..	..	..	..	..	..	..	2	..	..	..	..	..	..	..
Malone	..	..	..	..	..	..	1	1	..	..	..	..	..	..	..
Manatee	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..
Mandarin	..	..	..	..	..	..	..	2	..	..	..	..	..	..	..
Mayo	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..
Melbourne	..	..	..	..	..	..	1	1	..	..	..	..	..	..	..
Melrose	..	..	..	..	..	..	2	..	..	..	..	..	..	..	..
Metcalfe, Ga.	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..
Miami	7	..	..	1	..	..	7	2	..	..	..	..	..	..	..
Milton	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..
Monticello	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..
Mulat	..	..	..	..	..	..	1	1	..	..	..	..	..	..	..
New Smyrna	1	..	..	..	..	..	..	1	..	..	..	..	..	..	..
Ocala	..	..	..	..	..	..	2	..	..	..	..	..	..	1	..
Orlando	1	..	..	..	..	..	1	5	..	..	..	..	..	..	..
Palatka	1	..	..	..	..	..	1	..	..	..	..	..	..	1	..
Panama City	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..
Pensacola	7	7	..	..	..	..	1	4	5	..	..	..	..	3	..
Perry	..	..	..	2	..	..	1	..	..	..	..	..	..	..	..
Plant City	..	..	..	1	..	..	..	1	..	..	..	..	..	..	..
Quincy	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..
St. Augustine	1	..	..	..	..	..	3	..	..	..	..	..	..	..	..

*(MALARIA)*

TOWN	Diphtheria	Gonorrhea	Etiocautummal	Quartan	Tertian	Species not Determined	Typhoid	Tuberculosis	Uncinaria	Ascaris	Trichinaria	Tapeworm	Rabies	Wassermann	Oxyuris
St. Petersburg .....	..	..	..	..	..	..	..	1	1	..	..	..	..	..	..
San Antonio .....	..	1	..	..	..	..	1	..	1	..	..	..	..	1	..
Sanford .....	..	..	..	..	..	..	..	..	3	..	..	..	..	..	..
Sebastian .....	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..
Sneads .....	..	..	..	..	..	..	1	..	1	..	..	..	..	..	..
Tallahassee .....	..	2	..	..	..	..	2	..	3	2	..	..	..	..	..
Tampa .....	2	12	..	..	4	..	6	18	3	1	..	..	..	18	..
Port Tampa .....	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Titusville .....	..	1	..	..	..	..	..	..	..	..	..	..	..	1	..
Wauchula .....	..	..	..	..	..	..	..	..	2	..	..	..	..	..	..
Williston .....	..	..	..	..	..	..	..	..	3	..	..	..	..	..	..
Wimauma .....	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..
Winter Haven .....	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total .....	45	55	1	..	15	..	47	68	80	6	1	3	10	96	2



## BUREAU OF VETERINARY SCIENCE

## TICK ERADICATION

Cattle dipping vats reported constructed during February, 1917.....	0
Total number vats reported constructed to March 1.....	122

## GLANDERS

Diagnosed by Veterinarian during February, 1917.....	0
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## IMPORTATION OF CERTIFIED LIVE STOCK

Horses, 119; mules, 179; cattle, 108; hogs, 11.....	417
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## EXPORTATION OF CERTIFIED LIVE STOCK

Horses, 2; mules, 5; hogs, 1.....	8
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## VETERINARY INSPECTIONS FOR THE MONTH OF FEBRUARY

February 3-7, Raiford, Vaccination of hogs; Feb. 2-7, Raiford, vaccination of hogs; Feb. 13-14, Jacksonville, test cow for tuberculosis; Feb. 15, Jacksonville, test horse for glanders; Feb. 16, Jacksonville, test horse for glanders; Feb. 10, Jacksonville, test mule for glanders; Feb. 19, Pablo Beach, testing for glanders; Feb. 27, Jacksonville, consultation in office; tick eradication work in Escambia County; tick eradication work in Walton County; tick eradication work in Lake County.

AN EPIDEMIC OF RABIES IS NOW RAGING IN FLORIDA - THE LIVES OF ITS CITIZENS, ESPECIALLY THE CHILDREN, ARE ENDANGERED THROUGH BITES OF RABID DOGS, UNLESS THE OWNERLESS CUR DOG IS DESTROYED



Which

Shall

It

Be\_

THE CHILD

or



FLORIDA NEEDS A STATE LAW - FOR MUZZLING OF DOGS.



# HEALTH NOTES

OFFICIAL BULLETIN

PUBLISHED MONTHLY BY THE

## STATE BOARD OF HEALTH

ENTERED AS SECOND CLASS MATTER, FEBRUARY 17, 1915  
AT THE POSTOFFICE AT JACKSONVILLE, FLORIDA, UNDER THE ACT OF JULY 16, 1894

Vol. XII

April, 1917

No. 4 (New Series)

HON. FRANK J. FEARNSIDE, President  
Palatka, Fla.

HON. S. R. MALLORY KENNEDY, M. D.  
Pensacola, Fla.

HON. C. G. MEMMINGER  
Lakeland, Fla.

EDITED BY  
JOSEPH Y. PORTER, M. D., Secretary and State Health Officer

EXECUTIVE OFFICE  
State Board of Health Building, Springfield Boulevard  
Jacksonville

BRANCH OFFICES  
ASSISTANTS TO THE STATE HEALTH OFFICER

Tampa	Key West	St. Augustine
Pensacola	Gainesville	Ocala

Miami	AGENTS	Palatka
	Fernandina	

BACTERIOLOGICAL LABORATORIES  
CENTRAL LABORATORY  
Jacksonville

BRANCH LABORATORIES  
Tampa Pensacola Miami  
Tallahassee Key West

This Bulletin will be sent to any address in the State free of charge.

In case of outbreaks of smallpox, typhoid fever, diphtheria, scarlet fever, or any contagious disease, report to the State Health Officer, Jacksonville, and, if necessary, a medical officer will be detailed to take charge.

If you wish to know how to avoid tuberculosis, typhoid fever, malaria, hookworm, smallpox, diphtheria, etc., address the State Health Officer, Jacksonville.

If you think you have tuberculosis, typhoid fever, malaria, hookworm, or diphtheria, have your doctor take a specimen and send to one of the State Board of Health laboratories for examination.

Anything you want to know about sanitation and public health the Executive Office will try to tell you.

Should you have contagious diseases among your live stock, write to the State Health Officer for advice and help.

## LIST OF STATE BOARD OF HEALTH PUBLICATIONS FOR FREE DISTRIBUTION

- Poster 58, From Flies and Filth to Food and Fever, 1908, Third Edition, 12"x23"
- Poster 67, The Evolution of Consumption, August, 1913, Second Edition, 22"x30"
- Publication 77, The House Fly, Second Edition, May, 1914, pp. 11.
- Publication 86, Prevention of Ophthalmia Neonatorum, 1911, pp. 3.
- Poster 90, Smallpox Vaccination, April, 1912, 18"x24"
- Publication 92, Rules and Regulations of the State Board of Health and Public Health Statutes, with Supplements, March, 1912, pp. 77.
- Publication 99, Sewage Disposal for Rural Homes, Revised, Second Edition, August, 1914, pp. 10.
- Publication 103, Cattle Tick Eradication, Reprint from the 24th Annual Report of the State Board of Health of Florida, March, 1913, pp. 54.
- Publication 105, Malaria, April, 1913, pp. 8.
- Publication 106, Mosquitoes, May, 1913, pp. 16.
- Publication 108, Diphtheria, March, 1914, pp. 4.
- Publication 109, Measles, March, 1914, pp. 4.
- Publication 110, Scarlet Fever, March, 1914, pp. 4.
- Publication 111, Smallpox, March, 1914, pp. 4.
- Publication 117, Imhoff Tanks, May, 1914, pp. 6.
- Publication 118, Hookworm Disease and Soil Pollution, May, 1914, pp. 13.
- Publication 119, Consumption Leaflet, June, 1914.
- Publication 120, Rules and Regulations for the Importation of Domestic Animals into Florida, August, 1914, pp. 4 (Supplement to Publication 92).
- Publication 122, Common Sense in Contagion, October, 1914, pp. 8.
- Publication 123, Smallpox, December, 1914, illustrated, pp. 44.
- Publication 124, The House Fly, Carrier of Disease, December, 1914, illustrated, pp. 16.
- Publication 125, Baby Welfare, December, 1914, illustrated, pp. 17.
- Publication 126, Typhoid Fever, December, 1914, illustrated, pp. 23.
- Publication 127, Hookworm Disease, December, 1914, illustrated, pp. 30.
- Publication 128, Pure Water, December, 1914, illustrated, pp. 21.
- Publication 129, Tuberculosis, Its Cause, Prevention and Treatment, December, 1914, illustrated, pp. 18.
- Poster 130, Hookworm, December, 1914, 12"x25"
- Publication 131, The Serum Treatment of Hog Cholera by the "Single" and "Double" Methods, December, 1914, pp. 13.
- Poster 132, The Barn That Jack Built, Sanitary Poster, December, 1914, 15"x25"
- Publication 133, General Sanitary Management, December, 1914.
- Publication 134, Twenty-sixth Annual Report of the State Board of Health of Florida, 1914, pp. 247.
- Publication 135, Hookworms in Dogs, pp. 4, Reprint from Vol. IX, No. 10, October, 1914, Health Notes.
- Poster 136, Rats, 11"x20"
- Publication 139, Notice of Quarantine, Dade County, May, 1915, pp. 4.
- Publication 140, Rules and Regulations, Cattle Tick Eradication, Florida, May, 1915, pp. 6.
- Publication 141, Hookworm, leaflet, June, 1915.
- Publication 142, A Few Remarks on Preventive Medicine, July, 1915, pp. 16.
- Publication 143, Flies, July, 1915, pp. 4.
- Publication 144, Chemical Treatment of Water, July, 1915, pp. 7.
- Publication 145, Typhoid, July, 1915, leaflet.
- Publication 146, Pellagra, July, 1915, leaflet.
- Publication 147, The Sanitary Privy, July, 1915, leaflet.
- Publication 148, Whooping Cough, July, 1915, leaflet.
- Publication 149, Flies, July, 1915, leaflet.
- Publication 150, Malaria, July, 1915, leaflet.
- Publication 151, Measles, August, 1915, pp. 18.
- Publication 152, Save the Babies, October, 1915, pp. 19.
- Publication 153, Home Sanitation, January, 1915, pp. 20.
- Publication 155, Demonstration Train of the State Board of Health, January, 1915, folder.
- Publication 157, How to Test Cattle for Tuberculosis, April, 1916, pp. 8.
- Publication 158, Malaria, April, 1916, pp. 4.
- Publication 159, Some Poultry Pests, April, 1916, pp. 10.
- Publication 160, Annual Report State Board of Health of Florida, April, 1916, pp. 256.
- Publication 161, A Model Sewage Disposal Plant for a Rural Dwelling, Reprint Vol. XI, No. 3, March, 1916 Health Notes, pp. 6 (illustrated).
- Publication 162, Tick Eradication, Reprint Vol. XI, No. 3, March, 1916, Health Notes, pp. 14.
- Publication 163, Hog Cholera, pp. 30.
- Publication 164, Annual Report of Veterinary Department, 1915, Reprint from 27th Annual Report of the State Board of Health, April, 1916, pp. 56.
- Publication 165, Annual Report of Crippled Children Treatment, 1915, Reprint from 27th Annual Report State Board of Health, April, 1916, pp. 6, illustrated.
- Publication 166, Vital Statistics, 1915, Reprint from June, 1916, Health Notes, pp. 44.
- Publication 167, What You Should Know About Tuberculosis, Aug., 1916, pp. 32.
- Publication 168, "A Health Sermon," Reprint from June, 1916, Health Notes, pp. 6.
- Publication 169, "Sterilization of Water," Reprint from Oct. 1916, Health Notes, pp. 5.
- Publication 170, Rules of the State Board of Health of Florida Governing the Transportation of Dead Bodies, Mar. 1916, pp. 4.
- Publication 171, Rules and Regulations of the Florida State Board of Health Governing Morbidity Reports, Mar. 1917, pp. 4.
- Publication 172, 28th Annual Report of the State Board of Health of Florida, March, 1917, pp. 247.
- Publication 173, Annual Report, Bureau of Veterinary Science, 1916, Reprint from 28th Annual Report State Board of Health, pp. 31.

## bled white

By Senior Surgeon, CHARLES E. BANKS, U. S. Public Health Service

For over half a century, since the introduction of the roller process in the milling of wheat, the American people have scarcely known of the existence of such a thing as whole wheat flour. The "patent flour" to which they have been accustomed in the past fifty years is the artificial product of the wheat grain which has been almost denatured in the modern method of treating that indispensable cereal for human consumption. The sturdy forefathers of this Republic who were brought up on the coarsely ground wheat flour, with all its nutritious elements left in, were a naturally developed and hardy race who had been fed on this wholesome diet. Their descendants, brought up under the mistaken notion that the whiter the flour the purer the product are now showing in their pasty, anaemic complexions, and illustrating in their constipated lives, the legitimate result of five decades of a starchy diet. The wheat grain has been bled white to produce "patent flour" and the people have been starved thin in following the fetish of immaculately bleached bread. Their intestinal digestion as a consequence is disorganized to the point of inertia and the reign of liver pills, dyspepsia tablets, and stomach bitters, coincidently followed as the legitimate rulers of our dietetic kingdom. It is a tale of ignorance played upon and utilized by the commercial acumen of millers of "patent flour" who bolt out the nutritious husk of the wheat grain containing the phosphates, mineral salts, vitamins and the bran, and profitably sell this discarded portion as a diet for the beasts of the field. The housewives of America have been cajoled into the belief that flour of pearly whiteness was the most refined substance that could be offered to the human stomach for our sustenance. This system of double dealing, selling the starch to the people to make into bread and disposing of the more valuable part to the farmers as "feed" for their cattle, swine and chickens, is almost a tragedy to us hygienically and economically.

By the "patent flour" process which nets in milling only about three-quarters of the wheat supply in this country, the other quarter is lost to the people, not only in quantity but in that immeasurably better quality which comprises the finest nutritive elements that now go to the animals. In times of crop shortage, and under present war conditions it is an economic danger, while at all times it is a dietetic damage to the proper nourishment of the people. "Patent flour" is nothing more nor less than plain starch in essence, and when we consider that potatoes, another staple article of diet, are also pure starch,



it is evident that most of the table food of the ordinary family is just starch—a heat producing but not a strength giving substance. This diet, if persisted in exclusively, would result in malnutrition, and extensive experiments show that chickens fed on white flour bread solely for three weeks will be regularly paralyzed, and that they can be restored to health by a few days' feeding on the rest of the wheat grain which contains the life giving property. The same results are seen in the continued use of highly milled corn and the polished rice, the one believed to be an active factor in pellagra, and the latter a known factor in beri-beri. The human system gets so clogged with its constant efforts to digest and eliminate so much starchy food that sluggish intestinal conditions ensue, constipation becomes a fixed habit, and the laxative pill takes its place as the handmaiden of the bleached white "patent flour." White bread is simply a custom-made obsession of breadmakers and breadeaters. If the public once knows the taste of whole wheat bread it will never go back to the lifeless, pithless taste of white starch bread. The human system not only requires the nourishing, vitalizing elements of all the wheat grain, but the roughage of the cereal is Nature's laxative agency. It not only supplies valuable sustenance to the body but it truly "works while you sleep" in a natural way. With whole wheat flour restored to the American dietary, constipation would not only become a lost art, but the sturdy vigor of our forefathers would again appear in a regenerated race.

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### **THE PREVENTION OF BLINDNESS FROM BABIES' SORE EYES**

By GORDON L. BERRY

The blind population of the United States is estimated conservatively at from one hundred thousand to one hundred and twenty-five thousand. According to an estimate made by Mr. A. H. Walker, President of the Florida School for the Deaf and Blind, there are nearly 1,500 blind persons in this State. The great tragedy of it all is that of this tremendous State and national blind population, fully one half is made up of those who are needlessly blind.

Among the causes chiefly responsible for preventable blindness are trachoma (a disease of the eye-lids), industrial and other accidents, wood alcohol poisoning, glaucoma, and tuberculosis of the eyes. But more frequent than from any other single cause, and most tragic because preventable in practically one hundred per cent. of all cases, is the blindness caused by a disease which is technically termed "ophthalmia neonatorum"—popularly called "babies' sore eyes."

About twenty per cent. (20%) of the thousands of boys and girls enrolled in State Schools for the Blind in the United States are blind because of this disease, and because their eyes were neglected during the early days of infancy. Many more are partly blind from the same cause.

But in Florida *more than fifty per cent. (50%)* of our blind children who are today enrolled in the School for the Blind at St. Augustine are there because of this disease—this entirely preventable cause.

"Babies' Sore Eyes" begins as a redness of the eyes, usually within the first week after the baby is born, but it may come later. Besides the redness, the lids become swollen and matter or pus is discharged from between the lids. If it is at first neglected, it becomes much more difficult or even impossible to cure and unless a doctor sees the case soon after the first signs of the disease show themselves and if proper treatment is not at once commenced, the eyes may be damaged so that, even if they do not become entirely blind, sight may be lost to a very great extent. *Enough damage may be done in a day to make it impossible, even with the greatest care, to prevent total blindness.*

This eye disease can nearly always be prevented. In 1881, Credè, a doctor in Germany, who took care of hundreds of babies every year, discovered that if the doctor or midwife who takes care of the baby when it is born, would put a few drops of a simple medicine in the baby's eyes as soon as it is born, this would prevent the disease in almost all cases. Ever since this doctor in Germany made this discovery, doctors everywhere have been using this medicine and have proved that it will in ninety-nine cases out of one hundred prevent blindness from "Babies' Sore Eyes."

Care for *your* baby's eyes! If you don't see that proper treatment is provided it may be blind for life.

This disease—is PREVENTABLE.

is CURABLE—IF TREATMENT IS STARTED  
EARLY.

is CATCHING.

is CAUSED BY GERMS GETTING INTO the  
BABY'S EYES during or soon after birth.

If the germs are not killed or washed out, the eyes may get red and swollen and mattery, and the baby may go totally blind in two or three days.

"Babies' Sore Eyes" is NOT caused by Light nor by COLD, nor by Drops, But By Germs. Sore eyes in the baby do not always mean that the parents have not led good lives. Many kinds of germs cause sore eyes—and SORE EYES OFTEN CAUSE BLINDNESS.

## HOW BLINDNESS FROM BABIES' SORE EYES MAY BE PREVENTED

Only a few years ago blindness from this cause was much more frequent than it is today. The reduction of cases has been brought about by the gradual education of the general public to the dangers of this disease and by the increasing use of a prophylactic for the prevention of "babies' sore eyes" by physicians and midwives. The passage of State laws and health regulations which have designated this disease as "dangerous, communicable and reportable" has been accomplished in forty States. Many States provide free medicine for this disease, to be distributed for the use of physicians and midwives. Appropriations made by the Legislature, in some States as high as \$5,000.00 annually, enable the State Health Authorities to carry out a winning fight against blindness from this cause.

Mississippi, North Carolina, and Minnesota have most recently adopted such laws and it is believed that Georgia and Florida will be the next to take action of this kind.

## PREVENTIVE MEASURE OF THIS KIND NOW UNDER CONSIDERATION IN FLORIDA

Due to the interest of the State Board of Health of Florida, and with the active co-operation of the National Committee for the prevention of Blindness, there has been prepared for presentation at the current session of the State Legislature a Bill containing many of the standard features found in other State laws on this subject.

## A FEW SUGGESTIONS FOR SAFEGUARDING THE SIGHT OF ALL BABIES

As soon after birth as possible, the physician or midwife should drop two drops of a 1 per cent. solution of silver nitrate into each eye of every new-born child. These drops should be put in only once and should be washed out with a normal salt solution, two minutes later, to allay needless irritation. This medicine kills any germs that may be in the baby's eyes. It may make the eyes red for two or three days, but it does not cause the sore eyes that may make the baby blind.

Each time that the baby is bathed, its eyes should first be carefully wiped with bits of clean absorbent cotton which have been dipped in warm water that has been boiled, or in boric acid (saturated solution). A separate wipe should be used for each eye, stroking from the nose outward until the lids are washed perfectly clean. The hands of the person caring for the child must be thoroughly washed with soap and water and dried with a clean towel before the eyes of the child are touched, and everything that is used for the baby's eyes must be absolutely clean.

## WHAT MUST BE DONE IF INFLAMMATION OF THE EYES APPEARS

When the lids become red and swollen, and are gummed along their borders, and mattery discharge is mixed with the tears as the child sleeps or cries, an oculist or a physician should be called at once, or the child taken to the nearest dispensary. Each hour of delay adds to the danger. While waiting, bathe the eyes of the child every half hour with pieces of cotton dipped in solution of boric acid. Open the lids wide and allow the solution, which should be warm, to flood the eyes and wash out any matter which may have gathered there.

The child should not be fondled and nothing which has been used about the eyes or face should be used for any other purpose.

All of those in the home should be warned of the danger of catching the disease by getting the matter into their own eyes. Do not listen to those who say it will amount to nothing, or to those who say to bathe the eyes of the child with the mother's milk (the milk is a means of spreading the germs of this disease). Such advice is bad; the delay may result in blindness.

## REMEMBER

That—"Babies' Sore Eyes" is Not a Disgrace, for any baby may have the disease: but

That—BLINDNESS from "Babies' Sore Eyes" is a Disgrace because in 99 cases out of 100 IT CAN be PREVENTED; a Crime because of the suffering it brings to a helpless, innocent person.

That—the EYES of EVERY baby should be BATHED and TREATED with drops IMMEDIATELY AFTER BIRTH.

That—this costs nothing, but the support of a blind person is expensive.

That—REDNESS and SWELLING of the LIDS and DISCHARGE of MATTER from the baby's eyes during the first two or three weeks of life should BE TREATED. The baby may go BLIND in 48 hours if NEGLECTED. Don't use home remedies; GET A DOCTOR AT ONCE.

That—treatment is sometimes long and tiring, but a lifetime of blindness is longer.

That—there is NO SUCH THING as "COLD IN THE EYES;" it is NOT "natural for babies to have sore eyes;" sore eyes are not apt to "get well by themselves."

That—the disease is CONTAGIOUS and other members of the family may get it if they are not careful.



## REMEMBER

That—every baby has a right to have its eyes cared for.

That—Blindness MAY be PREVENTED, BUT if Sight is ONCE LOST THE BABY WILL BE BLIND FOR LIFE.

## THE MONEY SIDE OF BLINDNESS IN FLORIDA

Government statistics indicate that it costs about \$25.00 a year to educate a child in the public school systems of most States. It costs nearly ten times that amount every year to educate a blind child at the State School for the Blind at St. Augustine. More than half of the blind children who are enrolled there are blind because of the dread disease described in this article. Yet nearly every one of this group might have had their sight if the proper care had been provided at birth. Aside from the lifetime of darkness which is the cost of the neglect, there is a very material side which deals with the financial cost to the child, the family and the State.

The actual needless expenditure of State funds which will be necessary to educate this one group, blind because of babies' sore eyes, will amount to nearly \$50,000 before the children graduate. The loss to the State due to their great reduction in earning capacity and productivity cannot be measured in cash terms.

The expenditure of the small amount of State funds, which might be necessary to provide the prophylactic for use in the eyes of every child born in this State in future years, will be infinitesimal when compared to the toll of suffering and financial loss if blindness from this cause continues unabated on the present scale.

Money spent in this way is an investment—not an expenditure.

*Write the Representatives and Senators from your District today and urge them to aid in passing the Bill for Prevention of Blindness from "Babies' Sore Eyes."*

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## THE CHILDREN

### WHAT IS YOUR CHILD LEARNING ?

Much of a child's earliest education, often the most valuable and most enduring part, is that which is unconsciously acquired at home, not by precept or teaching but by imitation. From the earliest beginnings of learning the child is copying the sights and sounds about him.

Thus he learns to speak his first words, and from this time until he begins his formal education in school, and indeed through his entire



childhood, he is imitating the language, manners, and emotions of the older people about him. His behavior and opinions are undoubtedly to some extent the direct result of this copying of his elders. He will repeat the tricks of speech and manner which they constantly employ.

If a child lives among people whose language is correct and agreeable, whose manners are pleasant, who show always a thoughtful consideration for others and whose behavior is gentle and kindly, he unconsciously acquires similar ways. The habit of courtesy comes not alone nor chiefly from direct instruction, but from imitation. If a child sees that his elders are habitually courteous in their association with each other, if kindness and consideration for each other are the habits of the home, these qualities will inevitably stamp themselves upon the child. Good manners are an invaluable asset to every person, but good manners have their root and foundation in fine qualities of mind and heart, and only the constant daily exercise of them will help give the children that charm of manner which is such a delight in persons of every age. The opposite qualities are likewise imitated and help to produce another sort of child.

Clearly, therefore, parents have an enormous responsibility in molding and shaping a child into the kind of man he is to be, for these early lessons in conduct and manners are probably never quite eradicated. Men who as children were accustomed to hearing uncouth language still lapse in manhood into this fault, however well educated they may have become, and the same is true of physical mannerisms and even of the mental attitude. If a child grows up among people who are scolding, faultfinding, complaining, or quarrelsome, he is almost sure to show a tendency to these qualities, however much he may learn to abhor them in later life.

### CLOTHES FOR THE GROWING CHILD

Very much of the comfort of a child depends upon his having the right kind of clothing. This is especially true in summer. One hot day a mother came into an infant-welfare station in a large city bringing a screaming baby who would not be pacified. The trained and sympathetic eye of the nurse in charge saw that the little feet were covered with knitted woolen socks. She asked the mother to take them off. Immediately the screams ceased and the baby stretched his naked feet in delight at being relieved of the intolerable irritation.

During the hot months children should wear just as little clothing as possible. Babies require only a diaper and one other garment, while run-about babies and children up to five will be amply clothed in waist and drawers, with one outer garment, preferably a cotton slip, apron, or rompers, or one of the many similar garments illustrated in the pattern books.

The one-piece dress is a great boon to busy mothers, being easy to make and to wash and iron. If the kimono sleeve is used, the dress will be cooler, but in some garments the set-in sleeve is less clumsy and wears better. Rompers, loose at the knee and low-necked and short-sleeved may be used for little girls and boys alike. Denim overalls are rather cumbersome for the hottest weather but are adapted to cool days.

Starched, frilled, and fussy garments are all alike unsuitable for young children, whose clothing should be such as will make them perfectly comfortable and permit the freest play. No child should have to think of his garments during the play hours; he should of course be subject to reasonable restrictions upon wilful or mischievous soiling or destruction of his clothing.

Cotton is the best material for outside garments, since a child of this age should have no clothes that can not be washed. Mothers disagree as to the comparative merits of white clothing and colored. White garments may be boiled, and thus the amount of rubbing necessary to get them clean is very greatly lessened. On the other hand, white dresses are soiled almost as soon as the child begins to play out of doors. It must be remembered that while white or light colors show the soil sooner, there may be just as much actual dirt on the darker ones. It must also be remembered that light colors like blue, green, lavender, or pink are almost certain to fade unless they are washed with special care. Striped and check gingham fade less than plain materials, but often shrink badly in washing. Such materials should be shrunk before being made up. Seersucker and cotton crepe materials of many kinds have the great advantage of needing no ironing. These rough materials are not very cool and if used for summer wear should have short sleeves and round neck to avoid chafing of the skin of the arms and neck. Percale, galatea, madras, and the better grades of gingham or dress linen are all good materials for children's clothes. For hot weather almost any of the thin materials may be used.

### FEEDING THE CHILD OF FOUR

During the fourth year, milk still remains an important part of the child's food, but much of it may now be given in the form of bread and milk, milk soups, or milk puddings, or it may be poured over the cereal. Some children object to drinking milk, and in such cases it is wise to offer it under some such disguise. The cereal need no longer be strained but must be thoroughly cooked.

The diet at this time should include all the articles advised for the two earlier years, with the addition of more meats, vegetables, and fruits. Baked potatoes, with a little butter, are a staple food at this period. Bread and butter or toast and butter, and plenty of hard crusts or zwieback are important. Eggs or meat, such as roasted, boiled, or broiled beef, mutton, chicken or fish, should be given at least once a day.

The child of four will probably thrive on three or four meals a day, the heaviest being taken in the middle of the day. If he appears

to be hungry, a light lunch such as milk, may be given in the interval between breakfast and dinner or between dinner and supper, but no nibbling should be permitted between meals. A child should be taught to come to the table with that vigorous appetite for his food which leads to good digestion and assimilation.

Food should be carefully prepared to fit it to a child's powers and should be served in an appetizing fashion at proper intervals. Young children should not be offered "tastes" of the family meals, as this habit tends to destroy the appetite for the simple, rather restricted diet adapted to their need.

Children should have an abundance of pure cool drinking water. This is especially important in summer when they are perspiring freely. If there is any doubt about the purity of the water it should be filtered or boiled, or both.

Since it is always difficult for children to chew their food properly it should be finely minced, mashed, or softened for them throughout these early years.

Never under any circumstances should children be given coffee, tea, or strong cocoa. They should have no highly seasoned or spiced foods, rich pastries, raw vegetables, onions, corn, or cabbage. Bananas and all partly ripened fruit are apt to make trouble.

If children are inclined to be constipated they should have plenty of laxative foods. There are cereals, particularly oatmeal; the coarser breads, such as graham and whole wheat; fruit or fruit juice, particularly oranges and prunes; and vegetables like string beans, asparagus, and spinach.

Many children suffer from malnutrition, that is, they fail to secure the food materials they need for development and growth, and consequently they are undersized, pale, often slow and listless, and do not show the eager, alert habits of healthy children. Malnutrition may be due to lack of sufficient food of any kind, to improper food, bad cooking, or to some fault of digestion, or to illness which makes it impossible for the child to properly utilize the food he eats.

It is a wise precaution, therefore, if children are out of sorts, have decayed teeth, bad breath, or seem tired and disinclined to play, to have them examined by a good doctor, and to take all the trouble necessary to get them into sound eating habits. The neglect of these early symptoms may mean a lifetime of only partial health and efficiency.

## THE CARE OF THE GROWING CHILD'S TEETH

By the end of the second year the baby should have his milk teeth complete and until the sixth or seventh year, when the permanent set will begin to appear, these teeth must serve all the purposes that the final set will serve later. Since this is the time the child is learning to chew his food, a process necessary not only for proper digestion but for the strengthening and developing of his jaws and for the proper growth of the permanent teeth, it is important to keep the first teeth in the best possible working order. The condition of the teeth is a fair index to the general health of the child.

Until the child is old enough to use a toothbrush himself, the mother should wash his teeth every day; but as early as possible the child should learn to care for his own teeth. If the teeth can not conveniently be cleaned after each meal, the mouth may at least be rinsed. Children should be taught that it is of special importance to wash the teeth and mouth after eating nuts, or any sweet, sticky, or pasty food. The teeth should be carefully cleaned at bedtime since the fermentation of food particles left in the mouth, which leads to the decay of the teeth, proceeds more rapidly at night, when the mouth is still.

The child should be taught to brush the teeth from the gum downward or upward toward the cutting edge. When the teeth are brushed crosswise, the tendency is to push whatever is on them into the cracks and crevices of the teeth or under the edges of the gums. The inner surfaces of the teeth should also be brushed up and down, and the grinding surfaces should be scrubbed in all directions; after the scrubbing is finished the mouth should be thoroughly rinsed with warm water.

Some hard food like a stalk of celery or part of a ripe, juicy apple eaten at the end of a meal scours the surface of the teeth and leaves a fresh, clean taste in the mouth.

Children should be taken regularly to a good dentist once or twice a year after the first set of teeth is complete. If cavities appear they should be filled with soft fillings, and each tooth should be saved as long as possible. If the temporary molars are extracted before the sixth year molars come in, the latter will be apt to crowd forward into the space left vacant, and when the later teeth come they will be pushed out of their regular places, destroying the natural line of the mouth. The first molars furnish the grinding surfaces necessary to proper chewing of the food. If they fall out too soon the child is hardly able to chew hard or tough food, and is likely to swallow such food in chunks.

The care of the child's first teeth is important also because the health of the permanent set is largely dependent upon that of the first set. The second teeth are much larger than the first and consequently need more room in the gum. For necessary development the jaws must be given plenty of exercise. Consequently the child should have a mixed diet, including some hard food which he can not swallow without chewing. Toast, crusts, hard crackers, certain fruits like apples, salad, vegetables, and meats should provide the food elements needed for healthy teeth if the child is thriving.—*Press Service, Childrens Bureau, U. S. Dept. of Labor.*

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### A RETURN TO THE SIMPLE LIFE

"To return to the simple life is a proposition that will be welcomed by everybody that is interested in good health," says the State Board of Health. Continuing its sermonizes thus: "Too long have we been living on, the 'fat of the land' and feasting out of the 'flesh pots' with indigestion, constipation and other stomach troubles as the consequence,



and if it takes war or the high prices of food to break us away from these things and restore us to the things that are right and good for us, then these are not unmitigated evils."

The movement to return to nature and simple life is the solution offered to the high cost of living problem but health experts and enthusiasts have found it to be the only way of right living or healthful living known today. They have adopted it as a safe road to health. They say that a return to nature means good digestion, sound sleep, a clear head, a placid mind, contentment and joy to be alive.

But first they say it means getting close to nature—living out of doors as much as possible by working, playing and resting in the open air and above all by sleeping in the open air. "Outdoor sleeping is the best life preserver known." It means also going to the garden and orchard for your bill of fare—tomatoes, lettuce, celery, spinach, turnips, beans, corn, peas, melons, berries, apples, peaches, plums and all other fruits and green stuffs untouched by fire.

The real value of adopting the simple life, according to the health experts, lies in the pleasure we find in living it. To do it grudgingly or without knowing and appreciating it benefits, we botch it and fail, but to love health more than appetite and seek it, is to have health, comfort, efficiency and a long life. "Start the simple life—begin it today," is the motto of this health movement.—*Press Service, North Carolina State Board of Health.*

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At the annual conference of State and Provincial Boards of Health, held in the City of Washington on May 2nd and 3rd, the question of medical preparedness in connection with the rendering of service by the members of, not only the whole medical profession, but by those who have specialized in sanitary work such as State Board of Health operation and management, the following resolutions were adopted:

RESOLUTIONS ADOPTED BY THE CONFERENCE OF  
STATE AND TERRITORIAL HEALTH OFFICIALS AT  
THE SESSION HELD ON MONDAY EVENING,  
APRIL 30, 1917

We, the Executive Health Officials of the Several States and Territories, in conference assembled, do hereby

*Resolve*, That under conditions incident to a state of war, the public health personnel, resources and organization of the several States and Territories should be placed at the disposal of the Federal Government.

WHEREAS, The Federal Public Health Service has hitherto been the natural point of contact between the Federal Government and the several States and Territories in all matters pertaining to public health, and the aforesaid Service is thoroughly familiar with the manner of administration of public health measures by State and local boards and departments of health, be it therefore

*Resolved*, That it is the opinion of the Executive Health Officials of the several States and Territories in conference assembled, that the



Federal Public Health Service, under conditions incident to a state of war, should be the agency of the Federal Government through which correlation, supervision, and direction of the various State and local health agencies should be exercised, and be it further

*Resolved*, That aside from the hygienic and medical care of the actual military and naval forces, all sanitary and hygienic activities incident to a state of war which require a national policy, should be correlated, supervised, and directed by the United States Public Health Service.

WHEREAS, The present personnel and organization of the Federal Public Health Service is entirely inadequate, be it therefore

*Resolved*, That it is the opinion of the Executive Health Officials of the several States and Territories, in conference assembled, that a National Sanitary Reserve Corps should be created as an auxiliary to the Federal Public Health Service.

We, the Executive Health Officials of the several States and Territories, in conference assembled, do hereby unequivocally endorse the following resolution:

## JOINT RESOLUTION

### TO ESTABLISH A RESERVE OF THE PUBLIC HEALTH SERVICE

*Be it resolved by the Senate and House of Representatives of the United States of America in Congress assembled,*

That for the purpose of securing a reserve for duty in the Public Health Service in time of national emergency, there shall be organized, under the direction of the Secretary of the Treasury, under such rules and regulations as the President shall prescribe, a Reserve of the Public Health Service. The President alone shall be authorized to appoint and commission as officers in the said Reserve such citizens as, upon examination prescribed by the President, shall be found physically, mentally, and morally qualified to hold such commissions, and said commissions shall be in force for a period of five years, unless sooner terminated in the discretion of the President, but commission in said Reserve shall not exempt the holder thereof from military or naval service. Said officers shall consist of Sanitariums, Passed Assistant Sanitariums, and Assistant Sanitariums; and when ordered to active duty in the service of the United States, shall receive the pay, allowances, and leaves of absence of Surgeons, Passed Assistant Surgeons, and Assistant Surgeons, respectively, provided that the Secretary of the Treasury may appoint for duty with said reserve employees in such number as the public interest may require and the funds appropriated may permit.

That for the purpose of carrying out the provisions of this act the sum of \$..... be appropriated out of any money in the United States Treasury not otherwise appropriated.

## FOOD VALUES AND FOOD PRICES

By G. M. RANDALL, M. D.

The present propaganda to conserve food supplies and to provide and insure against deficiency is not a political move or a fanciful bugbear. It is right now an absolute necessity and as urgent as it is likely to be. A few facts and tables will be helpful to the economical, frugal and intelligent. By way of preface let us consider some units of measurement.

The unit of measurement of length is an inch, or if we use the metric system, a meter. The unit of weight is a pound, or in metric, a gram. The unit of liquid measure is the old British wine gallon—231 cubic inches, or in metric, the liter. We measure temperature by degrees on the thermometer.

Heating value of fuel is stated in British Thermal Units (written B. T. U.) or according to French method, the unit of heat is a calorie. For instance, the heating value, or, as it is spoken, the "calorific value" of hard coal is about 13,000 B. T. U. per pound. Of oak wood about 8,000 B. T. U. per pound. All combustible material has a definite heat producing value which is determined by combustion in a calorimeter, an instrument of much delicacy. The combustion chamber surrounded by a water jacket, combustion raising the temperature of an amount of water a reasonable number of degrees. Thus is computed the calorific value of fuels. The U. S. Navy does not buy coal just because it is a black mass of carbon, but makes calorimetric measurements and analyses of each sample submitted.

The human body is like a steam engine. It requires something to make it go. Food for the animal or fuel for the engine. A definite amount of fuel to evaporate water or make steam or a definite amount of food to convert into available energy in the animal.

Foods vary in their "calorific power" as much as fuels. The following table has been carefully worked out and is fairly accurate and very suggestive and safe for the guidance of any one wishing to compute adequate rations.

Daily food requirements vary as to age and activity. Without an intelligent method of computing, one may make serious errors in feeding. An excessive proteid diet results in disturbances of nutrition as well as does a diet of lighter food, such as fruit and vegetables. What we aim at is a balanced ration and it can be computed from the appended table:

## FOODS AS EATEN

DAIRY	Actual Amount	Household Measure	Approximate Grams			Carbo-hydrate
			Calories	Proteid	Fat	
Milk .....	8. oz. av.	a glass	160	7.5	9.5	12.
Skimmed Milk and Buttermilk .....	8. "	a glass	80	7.5	1.	11.5
Cream, thin (20 per cent) .....	.5 "	a teaspoon	30	.5	3.	.5
Cream, thick (40 per cent) .....	.5 "	a heaping teaspoon	60	.5	6.	.5
Condensed milk, sweetened .....	.7 "	a teaspoon	70	2.	2.	11.5
Condensed Milk, unsweetened .....	.7 "	a heaping teaspoon	35	2.	2.	2.5
Butter .....	.3 "	a pat or ball	80	...	8.5	...
Cheese, Cream .....	.5 "	one-inch cube	65	4.	5.	.5
Cheese, Skim-milk .....	.5 "	one-inch cube	45	4.5	2.5	.5
Cheese, American .....	.5 "	one-inch cube	70	4.	5.5	...
Eggs, whole .....	1.7 "	one	75	6.5	5.	...
Eggs, yolk .....	.5 "	one	55	2.5	5.	...
MEAT AND FISH (cooked)						
Beef Tea, clear soups .....	.5 "	a teacup	5-20	1-4.5	...	.5
Fish, lean (cod, flounder) .....	1.7 "	a heaping tablespoon	35	8.5	...	...
Fish, fat (shad, salmon) .....	1.7 "	a heaping tablespoon	105	11.	6.5	...
Meat, medium fat .....	1.7 "	a medium slice	70	11.5	2.5	...
Meat, lean .....	1.7 "	5x3x1/4-inch	130	11.5	9.	...
Meat, fat .....	1.7 "	...	200	8.5	18.	...
Oysters, (medium size, raw) .....	.5 "	one	8	1.	2.	.5
CEREALS AND VEGETABLES (cooked)						
Bread, white or graham .....	.8 "	one slice, 4x4x1/2-in.	70	2.3	.5	13.
Vienna roll .....	1.3 "	one	115	3.5	1.	22.5
Crackers (Uneda) .....	.2 "	one	30	.5	.5	5.
Cereals, cooked, moist .....	1.3 "	a heaping tablespoon	35	1.	...	7.
Cereals, eaten dry .....	.2 "	a heaping tablespoon	20	.3	...	4.
Shredded wheat .....	1.1 "	one	110	3.	.5	23.
Gruels (cereal) .....	.8 "	a soup plate	75	2.5	1.	14.
Thickened or cream soups .....	.8 "	a soup plate	160	5.5	4.5	24.
Macaroni .....	.8 "	a heaping tablespoon	25	1.	.5	4.
Potato, boiled or baked .....	3.2 "	one medium	90	2.	...	20.
Potato, mashed .....	1.2 "	a heaping tablespoon	40	1.	1.	6.
Rice, boiled .....	1.1 "	a heaping tablespoon	35	1.	...	7.
Corn, canned .....	1.2 "	a heaping tablespoon	35	1.	.5	6.5
Peas, fresh .....	1.1 "	a heaping tablespoon	40	2.5	1.	5.
Lima Beans, canned .....	.8 "	a heaping tablespoon	20	1.	...	3.5
Squash .....	1.2 "	a heaping tablespoon	20	.5	...	3.5
FRUITS						
Apple, Pear .....	.4 "	one medium size	75	.5	.5	17.
Apple Sauce .....	1.5 "	a heaping tablespoon	70	...	.5	16.5
Banana .....	3.3 "	one medium size	100	1.5	.5	22.
Orange .....	4.3 "	one medium size	70	1.	...	15.
Strawberries .....	3.3 "	a medium saucerful	40	1.	.5	7.5
Dried Figs, Dates, Raisins .....	3.3 "	a medium saucerful	350	2.5	3.	76.
Fruit Jelly, sweetened .....	1.7 "	a heaping tablespoon	160	.5	...	38.5
DESSERTS						
Custard .....	1.3 "	a heaping tablespoon	55	2.5	.5	9.
Ice Cream .....	1.3 "	a heaping tablespoon	135	1.5	9.	11.
Sponge Cake .....	.7 "	a slice 2x4x1/2-in.	75	1.5	2.	13.
Pudding (rice, tapioca, bread) .....	1.5 "	a heaping tablespoon	80	2.	2.	13.
ALCOHOL						
Whiskey, brandy, etc., (50 p.c.) .....	.1 "	a tablespoon	85	...	...	...
Wines, (8 to 25 p.c.) .....	.1 "	a small wineglass	85	...	...	...
		a small wineglass	15-50	...	...	...
MISCELLANEOUS						
Sugar .....	.3 "	a heaping teaspoon	33	...	...	8.
Honey .....	.3 "	a heaping teaspoon	33	...	...	8.
Olive Oil .....	.1 "	a teaspoon	37	...	4.	...
Olives .....	.2 "	one medium size	15	...	1.5	.5
Almonds, shelled .....	.8 "	a heaping tablespoon	165	5.	13.5	4.5
Cocoa Powders .....	.3 "	a heaping teaspoon	50	2.	3.	3.5

## DAILY FOOD DEMANDS

	Body Weight	Calories per lb.	Total Calories	Total Grams Protein
ADULT				
At rest in bed.....	150 lbs.	12	1800	72
Slight activity.....	"	15	2200	88
Light work.....	"	17	2600	115
Moderately hard work.....	"	20	3000	120
Very hard work.....	"	23-30	3500-4500	140-180

CHILD				
Age 0- 6 months.....	7-15 lbs.	42-40	300-600	1 gram per lb.
6-12 months.....	15-20 "	40	600-800	35-40
2 years.....	25 "	36	900	42
4 ".....	35 "	34	1200	55
8 ".....	50 "	28	1400	60
12 ".....	75 "	22	1600	75

1 gram protein equals 4.1 calories  
 1 gram carbohydrates equals 4.1 calories  
 1 gram fat equals 9.3 calories  
 1 gram alcohol equals 7.0 calories

Food	Albumin Per cent.	Fat Per cent.	Carbohydrate Per cent.
Cows' Milk.....	4.4.3	3-3.8	3.7
Buttermilk.....	3.0	1.3	3.0
Whey.....	0.5	0.3	3.6
Kumyss.....	3.35	2.07	3.4
Butter.....	0.5	90.	0.5
Cheese.....	33.0	9.0	5.
Beef.....	18.0	2.0	...
Veal.....	15.5	1.0	...
Poultry.....	22.0	1.0	...
Meat-broth.....	0.4	0.6	...
Beef-tea.....	0.5	0.5	...
Oysters.....	4.9	0.3	...
Eggs.....	12.5	12.	.5
Wheat flour.....	8.5	1.25	73.
Rye flour.....	10.0	2.0	69.
Oat meal.....	12.5	2.26	66.7
Barley meal.....	8.3	0.81	75.19
Rice.....	5.5	1.5	76.0
Beans.....	19.5	2.0	52.
Peas.....	19.5	2.0	54.
Potato.....	1.5	...	.5
Salt Herring.....	19.5	17.	.5
Pike.....	18.5	.5	.75
Caviare.....	28.4	16.2	7.8
Spinach.....	3.49	0.5	4.44
Cauliflower.....	2.7	0.4	5.0
Asparagus.....	2.0	0.3	2.5

## Health Briefs

### SOME HEALTH SAYINGS

(Monthly Bulletin, Indiana State Board of Health)

Crime is largely sickness and disease.

Poverty is largely sickness and disease.

Delinquency is largely sickness and disease.

Insanity is wholly sickness and disease.

Public health is public wealth.—*Franklin*.

Sickness lies at the bottom of delinquency.

"More virtue" is the cry, and virtue is health.

Hygiene can prevent more crime than any law.—*Munsterberg*.

National health will be followed by national efficiency.—*Fisher*.

Would you lower taxes? Then you must lessen disease.—*Reed*.

Neglect the public health, and taxes will surely increase.—*Reed*.

In the health of the people lies the strength of the nation.—*Gladstone*.

Healthy, strong men seek education and make opportunity.—*Jordan*.

Neglect the nation's health if you wish to make it decadent.—*Billings*.

The care of the public health is the first duty of the Statesman.—*Disraeli*.

Conservation of resources will naturally follow conservation of health.—*Fisher*.

It is within the power of man to drive sickness and disease from the world.—*Pasteur*.

The government which does not protect the health of its citizens is neither intelligent nor moral.—*Spencer*.

The State must prevent sickness and disease, if crime, poverty, delinquency and insanity, with their awful cost, are to be reduced.



## Correspondence

### MEASLES IN SCHOOL

State Board of Health, Jacksonville, Florida.

Dear Sir:—I have had four children in the school here. Three of them had the measles less than five years ago while the fourth did not take it although with the others all through their illness. Over two weeks ago another student rooming at our house took the measles, was in school some time with the fever on her, before it was known that she had measles. She left my house the next morning. The principal of the school prohibited my children from school attendance, both the ones who had already had them and the one who had not. Although this was over two weeks ago he still refuses to allow them to resume attendance.

I am advised by a reputable practicing physician that it is as sensible to quarantine a doctor who attends a case as it would be to quarantine my children. I have no great objection to keeping the one home who has not had the measles, but I am very anxious to get the others back in school at once and I want you to advise me fully by return mail exactly what my rights are in this case.

I enclose a letter written by this school principal under false information that my family had visited another where measles was prevalent. This will illustrate this man's fitness to exercise authority.

Please answer at once.

Respectfully,

Jacksonville, Florida, April 28, 1917.

Dear Madam:

Your letter of April 23rd, with enclosure from the principal of the school, I find on my desk this morning.

These matters should be taken up with the Board of Education of the County through the Supervisor of that school district. It is exceedingly difficult to lay down any hard and fast rules for the movement of students in a community where measles is epidemic. The disease being a self-limiting and self-protecting one a child that has had measles is perfectly safe to mingle with other children providing that he or she has not come direct from the bedside of a patient with measles. I am not one of those that place great stress upon clothing as disease carriers, except that the time between passing from the infected room or bedside to a non-immunized person or child is short. Children walking some distance from home to the school house have the advantages of nature's disinfectants, sunlight and air, and in this climate at this season of the year, particularly, where the temperature is mild and overcoats are not used or heavy wraps of any kind by girls, the probability of conveying measles from the home where the disease prevails to the school is exceedingly slight. Communicable diseases are spread by direct contact from person to person and aerial infection or infection conveyed through clothing is not worth much consideration; but this matter is all in the hands of the school board and you should take it up with them with the presentation of this letter and I hope that you may settle all differences all right.

Yours very truly,

(Signed) Joseph Y. Porter, State Health Officer.

### INQUIRY REGARDING SERUM FOR TUBERCULOSIS

Dr. Jos. Y. Porter, Jacksonville, Florida.

Dear Doctor:

Do you consider the use of serum of any great value in the treatment of tubercular cases?

I read Health Notes and have never seen where you advocated anything more than fresh air, nourishing food and rest.

Also in case of growing children is it best for them to observe the rules of quiet prescribed for adults?

Thanking you in advance, I am,

Yours very truly,

Jacksonville, Fla., April 10, 1917.

Dear Madam:

Acknowledging receipt of your letter of the 7th, I wish to say that so far, the use of "serum" in the treatment of tuberculosis has not proven of any great value, and as stated in Health Notes and various communications from this office, fresh air, plenty of it both day and night, good, nourishing food in abundance, freedom from worry, and where cases are not too far advanced light exercise, but not enough to tire, are of more benefit in the treatment of this disease than any medicine or serum that may be named.

With reference to that paragraph of your letter relating to children, I do not just understand whether you mean any growing children or a child suffering from disease. If it is the former you are aware of course that children are naturally active, and they should be allowed full freedom for this activity in the open air to become strong and well.

Assuring you that I am glad to be of service at any time possible, I am,

Yours very truly,

(Signed) Joseph Y. Porter, State Health Officer.

### **DYSENTERY PUZZLING**

Dear Doctor:

Have you any suggestion to offer: In the last two weeks have had seven cases of dysentery scattered over several miles (except two are within  $\frac{1}{4}$  mile of each other). I have not thought it was amoebic as all the first have made nice recoveries, or seem to have. I am insisting on the burial of stools and made a demonstration or two in killing flies. Treatment has been oil, buttermilk and sulpho-carbolates. Will make careful survey of our quarters tomorrow, although we have had no cases there.

What is the best way to keep from breeding flies in a mule lot?

Yours very truly,

Jacksonville, Fla., April 12, 1917.

Dear Doctor:

Your letter of the 8th reaches me this morning, and has my prompt and careful attention. There seems to be a great deal of bacillary dysentery existing in the peninsular portion of the State, and it has been puzzling the State Health Officer, and resident physicians to ascribe the cause. Like yourself, it was first thought to be amoeba, but investigation proved to the contrary, and also like your experience the treatment such as you outline has been beneficial and remedial. I hope that you will keep up your observation and let this office have the result of your investigations and findings.

Dr. Young in investigating a similar outbreak at Winter Park, thought flies had considerable to do with the spread of the infection, and doubtless this is true. In places where there are open closets with no provisions for germ destruction or guarding against carriers of infections, such conditions are bound to exist.

You ask the best way to keep from "breeding flies in mule lots." I should suggest to you that covering the manure with slacked lime, and by covering I mean well-covered, would prevent the breeding of the larvae, and when the manure is dry it could be burned. This does not seem to be a generally accepted way of disposal because of the value of manure as a fertilizing agent. It is an exceedingly difficult proposition to keep mules, horses and hogs and not have them prove a nuisance in a great many sanitary ways.

Yours very truly,

(Signed) Joseph Y. Porter, State Health Officer.

## Press Comment

### THE HOUSE FLY

At first thought the fly appears to be very fastidious in its personal cleanliness. In amazement we have watched its systematized washings, rubbings and brushings! How can this apparently neat little insect leave such a trail of virulent poisons across our food?

Let a house fly walk over a plate of cold meat, which has been boiled and jellied. In a few days, springing from each tiny footprint, a growth of bacteria may be plainly seen! Try it—it will make you shudder—and think!

The table may be spotless, the silver handsomely chased, the guests may be witty, wise and beautiful, but the housefly, with its germ-infested feet, makes it a banquet of death!

By the medical world the house fly has been condemned as being the most active and harmful of all man's foes, carrying death to more human beings than have all the beasts of prey and poisonous reptiles put together.

What a fearful charge! But wait! A member of the United States Public Health Service is authority for the statement that the "story of the danger of disease from the house fly has been only half told." Think of it—only half told!

While you are complaining about them, flies are multiplying. Statistics showing what mischief they are already responsible for will not serve to rid you of them.

Be enthusiastic in your active campaign against these enemies to the family's health and happiness!

When there has been a real awakening to the perils of the germ-distributing dynamo called the house fly, it is doomed.—East Coast Advocate.

### MISS I. N. FOOTE GAVE AN INTERESTING LECTURE AT DIXIE

Miss I. N. Foote, of the State Health Department made a most instructive visit to Fellsmere last week. Thursday morning she gave a talk on health matters before the public school children, and in the afternoon met with the mothers of the children, discussing physical questions with them. In the evening, before a good audience in the Dixie Playhouse, she spoke on tuberculosis, illustrating her subject with lantern slides. Saturday was devoted to the hookworm and over 40 samples from as many children were secured for testing in the laboratory.

Her visit was well received by our people, who were very much interested in the manner in which Miss Foote presented her subjects and all displayed a laudable desire to co-operate with her in advancing the health conditions of our youngsters.—Fellsmere Tribune.

## Heterinary Notes

### POULTRY IN BACK YARD

#### SUGGESTIONS FOR CARE OF SMALL FLOCK OF HENS— ECONOMY DEPENDS PRIMARILY UPON EGG PRODUCTION

From 12 to 15 hens are sufficient to provide the ordinary family with enough eggs and meat to render the keeping of the birds worth while, according to poultry specialists in the United States Department of Agriculture. The amount of outdoor space the flock will require may be estimated at about 25 square feet for each bird. There are instances in which chickens have thrived with much less than this, but unless the soil is especially favorable and the birds receive unusually good care, crowding is likely to prove unprofitable.

Poultry specialists do not recommend, however, that every one with the requisite space at his disposal should go in for chicken raising. Unless there is a natural interest in poultry or a determination to make the flock a source of real economy even if it does take time and trouble, the venture is not likely to prove successful. Lack of care may result in disease that will sweep off the entire flock, and it is almost certain to cause a reduction in egg production that will make the birds a burden instead of a help. In some localities where municipal ordinances may prohibit the keeping of poultry within certain limits, care should be taken that the poultry yard is not in a proscribed area.

#### SPACE FOR A FLOCK

While it is possible to get along with 25 square feet per bird, a larger space affording more green and insect food is very desirable. For one thing, the ordinary poultry keeper wishes to perpetuate his flock, and the raising of young chickens requires as much land as the keeping of mature hens. After she is 2 years old the best laying days of the average hen are over and it usually pays to get rid of her. This means that half of the flock must be renewed each year. Since as many cockerels as pullets will be hatched and a certain percentage are certain to die, it is customary to hatch each year a few more chickens than there are hens in the flock. With a flock of 25, for example, about 30 chickens should be raised. The same space must be allowed for these as for the laying hens. The cockerels are consumed through the season, being used either as broilers when they are 3 months old, as fryers, or as roasters.

It is also most desirable as a precaution against disease to divide the available area into two plats. On one of these the chickens are allowed to range while a green crop—wheat or oats, for example—is being grown for them on the other. The preliminary turning under of the soil, the green crop, and freedom from chickens for a period serve to prevent the land from becoming contaminated.

Additional range, with the advantage of a large supply of insect feed for the birds, may sometimes be obtained where a vegetable garden is maintained. At different times in the growing season there are areas in the garden which are either idle or occupied only by crops that the hens will not touch. The birds, confined to these with the aid of portable fences, benefit without injury to the vegetables.

#### SOME HOUSING REQUIRED

An important item to be considered by those thinking of maintaining a home flock is the cost of the house. For some part of the year, at least, in almost every section of the United States, chickens require the shelter of a tight, dry building. In planning the house, approximately 4 or 5 feet



of floor space should be allowed for each bird. The height may be determined by the convenience of the operator, for the birds themselves need only 2 or 3 feet. Such low houses, however, are very difficult to clean, and in consequence are likely to be neglected. It is better to build them so high that a man may work in them without discomfort.

A not uncommon device is to use a piano box for a chicken house. The cost of these houses depends largely upon circumstances, though no estimate can be given. It may be possible to find one the owner will be glad to give away; and, on the other hand, one may have to pay \$1.50 or more for a box that is no better. By combining two piano boxes a very satisfactory shelter for a small flock can be made at little expense. Where lumber must be purchased, it has been estimated that the materials for a substantial chicken house may cost anywhere from 50 cents to \$1.00 per bird, and it is not unlikely that with the present prices of commodities of all kinds these figures will be somewhat low. Portable chicken houses are also on the market at costs varying greatly. The majority, however, will probably cost the owner \$1.50 to \$2.00 for each chicken sheltered by them. In any event, it is probable that unless there is plenty of spare lumber available and the prospective poultryman happens to be a good carpenter, the cost of the chickens will not be met by the value of the products over the cost of feed for the flock for a year or two. The house should last, however, for a number of years, especially if painted and well cared for. Substantial profits from the investment should be made thereafter.

In many cases, also, where the surroundings are such that the chickens can not be allowed to range at will, the cost of fencing must be considered. This obviously will vary greatly with the size of the area to be inclosed and the kind of fencing selected. Ordinary chicken wire is not expensive.

#### COST OF KEEPING CHICKENS

The actual economy secured by the keeping of a small flock of chickens depends primarily upon their egg production, and this in turn is largely a matter of care. Under favorable conditions, however, it is estimated that 150 eggs the first year and 120 the second is a fair return from the ordinary hen. On the other hand, at least from 25 to 50 cents a year must be expended for grain and other feeds, the exact amount depending upon the quantity of table scraps and green and insect food available. Where all the feed must be purchased, from \$1.00 to \$1.25 is allowed. Even in the most thrifty household, however, there is always a large quantity of table scraps, vegetable parings, and other "left overs" for the hens, so that a considerable portion of their feed consists of what otherwise would be carried off the place by the garbage man.

Although of less importance than the eggs, the supply of poultry for the table furnished by the home flock is an item that can not be overlooked. As has been pointed out, in a flock of 25 which the owner is perpetuating there will be approximately 12 or 13 cockerels almost all of which can be used best for food. Half of the hens must go each year also, so that allowing for losses and for birds reserved for breeding there still will be enough appreciably to affect the butcher's bill.—Weekly New Letter, United States Department of Agriculture.



## Summary of Public Health Administration, March

### SOUTHWESTERN DISTRICT

Tampa: Routine work, office of the Assistant to the State Health Officer. Management of communicable diseases, and investigation of sanitary nuisances.

### WESTERN DISTRICT

Pensacola: Routine work, office of Assistant to the State Health Officer. Investigation suspected case smallpox; management of communicable diseases, and supervision of inspections by sanitary patrolman as follows: Screening Law—butchershops, 1; grocery stores, 3; bakeries, 1; fruit stands, 10. Surface Closet Law—private residences, 15. Abatements ordered where violations existed. Communicable Diseases—smallpox, 2; typhoid fever, 1; tuberculosis, 5; measles, 4; fumigations, releases, etc., 5.

### SOUTH EAST COAST DISTRICT

Key West: Routine work, office of Assistant to the State Health Officer. Investigation of sanitary complaints, and abatements ordered. Routine examinations conducted in laboratory.

### SOUTH CENTRAL DISTRICT

Lakeland: Consultation with mayor regarding Stevens cans; inspection of toilets using same as to the durability of cans; inspection of sanitary condition of town; consultation with Member State Board of Health.

Mulberry: Accompanied Sanitary Engineer of State Board of Health on survey of town. Inspection of school toilets; examination of suspected case of typhoid fever; further investigation of an epidemic of measles.

New Orleans, La.: Attending conference on Intensive Community Work at Hotel Grunwald; guests of Rockefeller Sanitary Commission.

Jacksonville: Conference with State Health Officer.

Moore Haven: Investigation of an epidemic of typhoid fever with Sanitary Engineer. Sanitary survey of town. Examination of patients. Administration of vaccine. Collection of data and the making of Widals.

Labelle: Consultation with Post Master regarding the presence of an epidemic reported by him.

Tampa: Consultation with Bacteriologists and the submission of specimens collected for examination.

Plant City: Accompanied Engineer on Sanitary survey of place. Collection of specimens of sewage for efficiency tests. Enforcement of Screening laws. Inspections for same. Inspections of insanitary toilets, unscreened fruit stands, etc. Usual routine duties and correspondence.

Winter Park: Investigation of an epidemic of dysentery. Inspection of sanitary conditions, milk supply, sanitary nuisances. Consultation with doctor and public citizens regarding health conditions.

### CENTRAL DISTRICT

Ocala: Routine work, office of Assistant to the State Health Officer. Talk with mayor regarding health ordinances for new city charter. Called in consultation to make diagnosis of measles.

Fruitland Park: Sanitary inspection of town.

Sparr: Consultation with attending physician concerning case of diphtheria.

Fruitland Park and Oakland: Consultation with attending physician concerning case of scarlet fever; isolation of case and instructions in regard to prevention of spread of the disease.

## NORTH CENTRAL DISTRICT

Live Oak: Routine office duties; laboratory work; lectures to high schools.

Lake City: Scarlet fever, one case; isolation; no spread to date.

White Springs: Smallpox; one case in addition to four reported on March 23d, developed; 126 vaccinations done; control by vaccination and isolation. Two return trips for observation of disease.

## NORTH EAST COAST DISTRICT

St. Augustine: Routine work, office of Assistant to State Health Officer. Inspection of premises on Cordova St.; inspection of cow lots in North City.

Jacksonville: Consultation with State Health Officer. Assistance at demonstration of home pasteurization of milk; short talk given in connection with work.

Daytona: Investigation alleged outbreak of typhoid fever at Seabreeze; sanitary survey of hotel premises.

Daytona and Daytona Beach: Address before Christian Forum on "A Community Health Programme."

New Smyrna: Sanitary inspection.

Fellsmere: Talk on "Diseases and Their Prevention."

## WEST CENTRAL DISTRICT

Tallahassee: Routine work, office of Assistant to the State Health Officer. 60 vaccinations done at Colored Normal and Industrial School against smallpox. Diagnosis of septic sore throat made for attending physician. 20 anti-typhoid vaccinations ordered for State College for Women. Management of communicable diseases occurring in District as follows: typhoid fever, 5; diphtheria, 2; septic sore throat, 1; measles, 6.

Quincy: Lecture on Public Health subject given at request of Boosters Club.

## EDUCATIONAL HEALTH EXHIBIT TRAIN

Towns visited during March: Williston, Montbrook, Morrison, Juliette, Dunnellon, Gulf Junction, Crystal River, Citronelle, Hernando, Inverness, Floral City, Istachatta, Trilby, Mascotte, Clermont, Oakland, Winter Garden, Clarcona, Forest City, Sylvan Lake, Paola, Sorrento, Mount Dora, Tavares, Eustis, Altoona, Umatilla, Fort Mason, Lisbon, Leesburg, Trilby, Richland, Kathleen, Lakeland, Plant City.

Number of towns visited in 1917 to April 1.....78

## PUBLICITY AND PUBLICATIONS

Monthly Bulletin, "Health Notes, Vol. XII, No. 3, Mar., 1917, pp. 28. Press service bulletins to Florida newspapers: Mar. 7, "Rabies in Florida;" Mar. 14, "Relation of State Board of Health to Medical Practice in Florida;" Mar. 21, "Efficiency in State Board of Health;" Mar. 28, "What Are Handkerchiefs For."

Publications out in March: Pub. 172, Twenty-Eighth Annual Report of the State Board of Health of Florida, 1916, pp. 247. Pub. 173, Annual Report, Bureau of Veterinary Science of the State Board of Health, 1916, pp. 31, Reprint from 28th Annual Report of State Board of Health, 1916.

Distribution of Literature during March:

Mailed upon request and distributed in field.....	5,200
Press service bulletins to Florida newspapers, 4 issues.....	1,200
Health Notes, March, mailing list.....	10,700

Total number pieces distributed.....17,100

Number pieces literature distributed in 1917 to April 1.....48,595

## SMALLPOX

Reported cases of smallpox in Florida, March, 1917:

Dowling Park, Suwanee County.....	1
Orlando, Orange County.....	1
Ormond, Volusia County.....	1
Pensacola, Escambia County.....	2
Tampa, Hillsborough County.....	5
White Springs, Hamilton County.....	4
Total cases.....	14
Total reported cases in 1917 to April 1.....	20

## DISTRICT TUBERCULOSIS INSPECTION

Monthly Report, Status of Tuberculosis District Nursing, Month Ended Mar. 31, 1917

<i>Residence of Cases Visited to Date, by Districts</i>	<i>Total Number of Cases Under Instruction, Last Report</i>	<i>New Cases Found Month Ended</i>	<i>Cases Found to Have Died</i>	<i>Cases Removed</i>	<i>Cases Apparently Cured</i>	<i>Total Number of Cases in District Under Instruction to Date</i>	<i>Total Number of Cases Following Instruction</i>
District No. 1.....	60	2	..	..	..	62	51
District No. 2.....	48	..	..	..	..	48	25
District No. 3.....	155	..	..	..	..	155	107
District No. 4.....	74	..	..	..	..	74	64
District No. 5.....	147	4	1	..	..	150	105
District No. 6.....	225	7	8	4	3	217	155
District No. 7.....	31	..	..	..	..	31	31
District No. 8.....	107	4	4	..	..	107	47
District No. 9.....	175	2	..	4	1	172	172
District No. 10.....	170	5	..	22	..	153	72
District No. 11.....	112	3	2	..	..	113	79
District No. 12.....	230	9	1	..	..	238	238
Colored Nurse, State at Large	169	17	17	16	3	150	126
	1,703	53	33	46	7	1,670	1,272

## BIOLOGICAL PRODUCTS

Distribution of Biological Products during March (anti-rabic and typhoid vaccine, diphtheria and tetanus antitoxin free to indigent only.) Number of persons receiving treatment:

County and Town	Anti-Smallpox Vaccine	Anti-Rabic Vaccine	Anti-Typhoid Vaccine	Diphtheria Antitoxin, Curative and Immunizing	Tetanus Antitoxin, Immunizing
ALACHUA					
Newberry .....	..	1	..	..	..
BRADFORD					
Starke .....	20	..	..	..	..
DADE					
Miami .....	50	..	..	..	..
Perrine .....	10	..	..	..	..
DUVAL					
Jacksonville .....	289	26	2	..	1
Baldwin .....	20	..	..	..	..
ESCAMBIA					
Pensacola .....	10	..	..	..	..
GADSDEN					
Chattahoochee .....	30	..	..	..	..
HAMILTON					
White Springs .....	120	..	..	..	..
HILLSBOROUGH					
Tampa .....	30	1	..	1	..
JACKSON					
Campbellton .....	..	..	..	6	..
Sneads .....	..	..	10	2	..
JEFFERSON					
Monticello .....	..	1	..	..	..
MADISON					
Madison .....	50	..	..	..	..
ORANGE					
Orlando .....	20	..	..	..	..
PALM BEACH					
West Palm Beach .....	10	..	..	..	..
POLK					
Fort Meade .....	..	..	..	4	..
Winter Haven .....	..	..	..	8	..
SUWANNEE					
Dowling Park .....	20	..	4	..	..
Live Oak .....	30	..	..	..	..
McAlpin .....	..	1	..	..	..
ST. JOHNS					
St. Augustine .....	600	..	..	..	..
ST. LUCIE					
Ft. Pierce .....	30	..	..	..	..
VOLUSIA					
Daytona .....	10	..	..	..	..
New Smyrna .....	50	..	..	..	..
WAKULLA					
Arran .....	13	..	..	..	..
Total.....	1,412	30	16	21	1

Total number persons receiving anti-smallpox vaccine in 1917 to April 1st.....1,766  
 Total number persons receiving anti-Rabic vaccine in 1917 to April 1st..... 54  
 Total number persons receiving anti-typhoid vaccine in 1917 to April 1st..... 141  
 Total number persons receiving diphtheria antitoxin in 1917 to April 1st..... 75  
 Total number persons receiving tetanus antitoxin in 1917 to April 1st..... 7

## CRIPPLED CHILDREN

NAMES								Operating, Plaster Work, Special Treatment, Etc.	Date Discharged and Condition	Diagnosis	Under Treatment 4-1-17
	In St. Lukes 3-1-17	In Brewster (Colored)	Outside Treatment	Applications Received	Admitted St. Lukes	Admitted Brewster	Admitted for Office Treatment				
C. B.	1	..	..	..	..	..	..	1	3-15-17 Cured....	Volkman's Con- tracture arm ..	..
A. B.	1	..	..	..	..	..	..	1	Massage .....	Poliomyelitis paralysis ..	..
M. B.	1	..	..	..	..	..	..	1	Dressings .....	Club foot.....	1
O. D.	1	..	..	..	..	..	..	1	Dressings .....	T. B. Peri-renal	1
W. L.	1	..	..	..	..	..	..	1	Cast 3-12-17.....	Osteomyelitis tarsus ..	..
H. M.	1	..	..	..	..	..	..	1	Dressings .....	Osteomyelitis vertebrae	1
H. M.	1	..	..	..	..	..	..	1	Dressings .....	T. B. Hip and Sacrum	1
R. W.	1	..	..	..	..	..	..	1	Massage, Brace.....	Spastic paralysis	1
A. T.	1	..	..	..	..	..	..	1	Dressings .....	Osteomyelitis tibia ..	..
I. P.	1	..	..	..	..	..	..	1	Cast 3-9-17.....	Osteomyelitis tibia	1
F. P.	1	..	..	..	..	..	..	1	Dressings .....	T. B. Hip.....	1
M. P.	1	..	..	..	..	..	..	1	Exercises .....	Scoliosis .....	1
D. M.	..	..	..	..	3-	..	..	1	Operation 3-26-17...	Club foot.....	1
M. M.	..	..	..	..	16-	..	..	1	Op. Arthrodesis 3-24	Polio-paralysis leg and ankle	1
	3-	..	..	..	17	..	..				
Total	12	..	..	..	2	..	..	14	4		10

## BACTERIOLOGICAL LABORATORIES

## SPECIMEN EXAMINATION

	Jacksonville	Tampa	Pensacola	Key West	Miami	Tallahassee	Total
Animal Parasites .....	175	86	31	5	16	37	350
Diphtheria .....	247	71	7	2	3	17	347
Gonorrhoea .....	93	35	46	2	21	12	209
Malaria .....	145	144	24	2	21	54	390
Pathological Ex.....	..	8	..	..	19	..	27
Rabies .....	15	1	..	..	..	..	16
Tuberculosis .....	168	92	45	2	27	17	351
Typhoid .....	159	171	26	1	25	32	414
Water: Bacterial Ex....	..	..	4	2	20	..	26
Wassermann .....	565	157	..	..	..	..	722
Miscellaneous .....	16	169	15	1	70	42	313
	1,583	934	198	17	222	211	3,165

Total number of specimens examined in the Laboratories of the State Board of Health of Florida, during March, 1917.....3,165





## MALARIA

TOWN	Diphtheria	Gonorrhoea	Estivoautumnal	Quarlan	Tertian	Species not Determined	Typhoid	Tuberculosis	Uncinaria	Ascaris	Trichurias	Strongyloides	Tapeworm	Rabies	Wassermann	Oxyuris
Sebastian .....	1	..	..	..	..	..	..	..	2	..	..	..	..	..	..	..
Sneads .....	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Sparr .....	..	5	..	..	4	..	3	..	3	..	..	..	..	..	3	..
Tallahassee .....	4	4	..	..	..	..	12	15	3	6	4	..	..	..	32	..
Tampa .....	..	..	..	..	..	..	..	..	2	..	3	..	..	..	..	..
West Tampa .....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4	..
Tarpon Springs .....	..	1	..	..	..	..	..	..	1	..	..	..	..	..	1	..
Titusville .....	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..
Tisonia .....	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..
West Palm Beach .....	..	..	..	..	..	..	..	1	..	..	..	..	..	..	1	..
West Point, N. Y. ....	..	..	..	..	..	..	..	1	1	..	..	..	..	..	..	..
Wewahitchka .....	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..
Williston .....	..	..	..	..	..	2	..	..	..	..	..	..	..	..	..	..
Wimauma .....	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..
Winter Haven .....	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Zolfo .....	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..
Total.....	15	69	3	..	11	..	80	65	63	10	9	2	1	9	194	1

BUREAU OF VETERINARY SCIENCE  
TICK ERADICATION

Cattle dipping vats reported constructed during March, 1917..... 1  
Total number vats reported constructed to April 1.....123

GLANDERS

Diagnosed by Veterinarian during March, 1917..... 0

IMPORTATION OF CERTIFIED LIVE STOCK

Horses, 58; mules, 21; cattle, 369; hogs, 25.....473

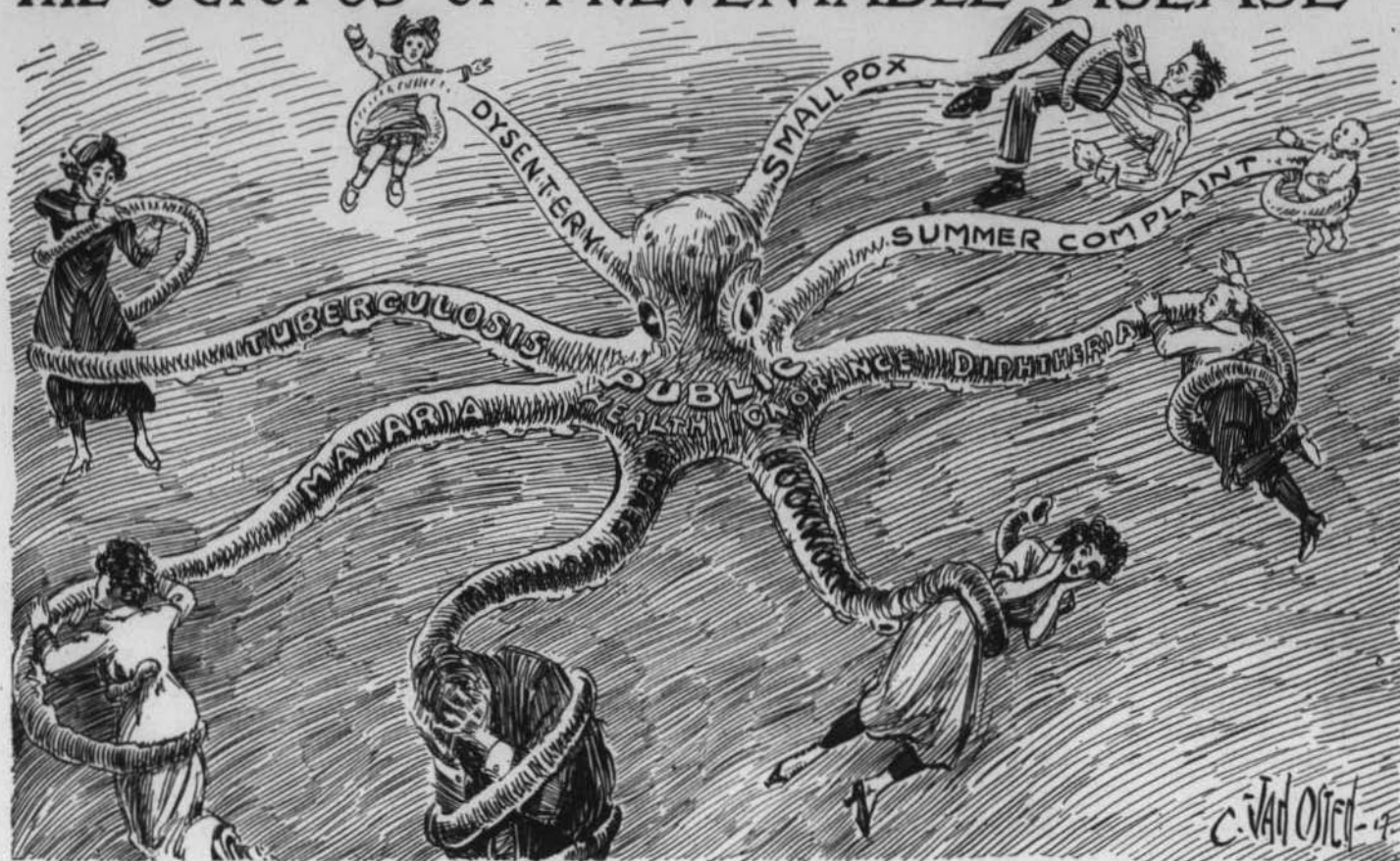
EXPORTATION OF CERTIFIED LIVE STOCK

Horses, 49; mules, 7; cattle, 640; hogs, 105.....801

VETERINARY INSPECTIONS FOR THE MONTH OF MARCH

March 1-2, Orlando, testing horses for glanders, negative; Mar. 2-7, Madison, Filling vat and dipping cattle; Mar. 5-6, Waller, testing horses for glanders, negative; Mar. 7-14, Okeechobee, dipping cattle for interstate shipment; Mar. 15, Jacksonville, investigate hog disease on Kings Road, cholera; Mar. 28-30, investigate disease in sheep; Mar. 1-31, tick eradication work in Walton County; Mar. 1-31, tick eradication work in Santa Rosa County; Mar. 1-31, tick eradication work in Lake County; Mar. 1-31, tick eradication work in Escambia County, Mar. 1-31, tick eradication work in Monroe County.

# THE OCTOPUS OF PREVENTABLE DISEASE



P.H.R.



# HEALTH NOTES

OFFICIAL BULLETIN

PUBLISHED MONTHLY BY THE

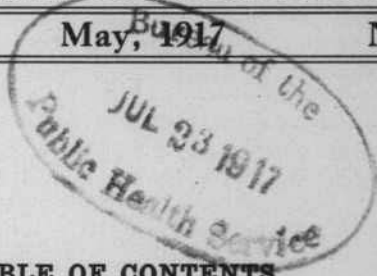
STATE BOARD OF HEALTH

ENTERED AS SECOND CLASS MATTER, FEBRUARY 17, 1915  
AT THE POSTOFFICE AT JACKSONVILLE, FLORIDA, UNDER THE ACT OF JULY 16, 1894

Vol. XII

May, 1917

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STATE BOARD OF HEALTH  
OF  
FLORIDA

---

HON. CHARLES T. FRECKER, *President*, Tampa  
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HON. J. E. GRAVES . . . . . DeFuniak Springs

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MISS F. D. HERNDONE, *Assistant*  
Bureau of Communicable Diseases . . . . . DR. V. H. GWYNN

---

DISTRICT HEALTH OFFICERS

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DR. J. E. TAYLOR (Temporarily)	Live Oak
DR. H. O. SNOW	Tampa
DR. HAMBLIN	Ocala
DR. A. W. UNDERWOOD	St. Augustine
DR. G. A. DAME	Inverness
DR. W. R. WARREN	Key West
DR. C. T. YOUNG	Miami

---

LABORATORIES

Jacksonville	Tampa	Pensacola
	Miami	

## ANNOUNCEMENT

## STATE BOARD OF HEALTH

The new State Board of Health has assumed its responsibilities and it is pertinent at this juncture to set forth its position. The Board is fully aware that it takes up its duties under unusual circumstances; under circumstances in which it expects every official act to be a subject of contention; every expression to find its critics.

Whatever crisis might arise, it expects to be held to strict account; and in the absence of crises, it expects to be watched with an eagle's eye, watched not only in our own State, but throughout the nation, and by our neighbors, Central America, Mexico and Cuba.

But imbued with the belief that public health management is a science and that this science has to be mastered by hard licks,—in fine, that health officers are MADE, not BORN, we enter upon our duties with less trepidation than confidence.

We do not expect to institute any revolutionary changes in the management of epidemics. When smallpox comes it will be managed along lines that have evolved out of a thousand years of struggle. If plague comes, and cholera, they will be managed as they would by any other efficient body, and even if yellow fever comes we will not be found taking to the tall timber. So much if epidemics come. But when there is no epidemic, that is the time to measure the strength of your health organization. It has been a dozen years since we had yellow fever, and will probably never have it again, and we have never had plague or cholera; but we still have malaria, and we still have tuberculosis, and hookworms are still popular, typhoid fever is all too prevalent. And it should be understood that *Typhoid Fever* and other intestinal infections are the *Barometer by which Public Health Efficiency is Measured*. Now in the management of these endemic diseases there will be no radical changes of policy, but there will be changes of *intensity*.

A few changes in personnel have already been made, and a few others are contemplated. *But these are all upon the basis of Economy, Efficiency, or Harmony.*

Now, two things we would ask of the public—give us reasonable time, not too much; and give us *generously of your co-operation*, and then compare our work with other State Boards of Health, not the low grade, or the medium, but the high, and *we ask no clemency at your hands.*

## Health Briefs

### DO YOU KNOW THAT

Civilian health is the rock upon which military efficiency rests?

---

The little house fly is a dangerous thing,  
the time to "swat 'em" is in spring?

---

The ingestion of wood alcohol may produce blindness?

---

Swimming is a healthful exercise?

---

Human beings are the great agencies in the spread of human diseases?

---

No community can be really successful without safe waste disposal?

*U. S. Public Health Service.*

## Things in General

It is reported that Dr. Henry Hanson, formerly Director of the Bacteriological Laboratories of the State Board of Health, has gone to the front. Excuse me, but Dr. Hanson has always been at the front.

---

So far as we know, the only case of thriving triplets in the State, are those of Hon. Charles T. Frecker, of Tampa. It is fitting that their father should be President of the State Board of Health.

---

A certain legislator was complimented on looking so well. "Yes," he said, "They got me up here and run me through the dipping vats, and"—Just then the House was called to order, and they passed the Live Stock Bill.

---

Another bill that has been hanging fire for the last several terms was one creating an Embalmers' Licensing Board. It is hoped that at least one objection to dying is thereby removed.

---

Old Ben King, down at Fort Meade is none of your high-toned engineers but he pulled off a stunt that got his picture into every engineering journal from hither to yon. It was a method of unstopping a sewer. Like Columbus balancing the egg, anybody could do it, but it took Ben King to show 'em how. All he did was to tie a rope to a little alligator, and put him down through the manhole, whereupon the little 'gator threaded his way through to the next manhole, where he was taken out, and then the rope see-sawed back and forth between the manholes—if need be a chain drawn through—till the sewer was clean. That's what Sam Weller would call the "art of invention."

---

"Say, Moike, how do you account for this can shortage?"

Mike (an erstwhile ward politician): "Too much canning."

---

Dr. Plummer of Key West delicately told his colored patient that he had tuberculosis, but not to be alarmed—it was a curable disease. "Na, na, Doctor," said the old darkey, despondently: "My wife died of 'buckalosis' and she didn't have bot one. Na, na, Doctor."

---

From a child's essay on tuberculosis—"Tuberculosis used to kill everybody, but now anybody can cure it—even the doctors sometimes do."

---

Headline in a local paper: "Splendid Lecture on Hookworms—The Doctor Full of His Subject."

## **DADE COUNTY TO THE FRONT AGAIN**

Dade County has just taken another advance step—the Board of Public Instruction has detailed one of their teachers to devote her entire time, in co-operation with the State Board of Health to child hygiene. She is a fine woman equipped with a car and a good understanding, and will be heard from.

But what else could you expect of Dade County with Dr. A. Light Monroe as Chairman of the School Board, and Prof. R. E. Hall as Superintendent of Public Instruction?

---

## **THE NEGRO AND HIS RELATION TO PUBLIC HEALTH**

A great deal has been said about the negro and his relation to public health. You may take a walk through what is known in the South as the "quarters" or "niggertown," and will, perhaps, be impressed with the general dilapidated condition of the houses, fences, etc. Upon closer observation you will probably find that the houses are wholly without sanitary conveniences; the water used comes from a shallow well and the toilets are a pathetic makeshift. Now, who is to blame?

The negro from his small weekly wage is paying a high rent for this box of a house. He could hardly be expected to replace broken windows, repair leaky roofs, screen houses or privies on rented property. Few white tenants will do as much. The negro makes noticeable improvements as he is financially able. You can usually select the houses which are occupied by the owner, in these districts.

It is into these same squalid huts that your clothes are carried to be washed, ironed and stacked upon the beds till ready to be placed in the basket to be carried home by some of the children of the family. From these same huts come the cook each day to do service in your kitchen; where your maid-of-all-work comes from to do the weekly cleaning; and where the nurse maid carries your children to play during the day when they are told to take them out into the "fresh air."

How many times have you seen white children playing with the black children in the yards of such houses? "Oh!" you say, "I never go down in niggertown." Well, perhaps you do not, but some of niggertown comes to you, for a white child can contract a fatal case of diphtheria from a mild case in a negro child. Tuberculosis may also be contracted in the same way, and in fact, any of the communicable diseases. Disease germs draw no color lines.

Therefore, one way to help the negro to be a less menace to public health, is to provide sanitary living quarters for him, houses built with some thought for ventilation, and proper toilet facilities, even if at greater rent, and it will surprise you how quickly he will fall in line, and become an actual help in the great fight for better sanitation.

D. H.



Miasmas.—In former days, when there was a widespread belief that epidemics of disease were caused by emanations of foul-smelling gases, the offensive conditions in a highly polluted stream were considered a gross menace to the health of persons in the immediate vicinity. Nowadays it is recognized that foul odors and disgusting appearances, while certainly not conducive to health or happiness, exercise at most an ill-defined, probably indirect, influence in the causation of disease; and while the necessity for abating such nuisance is universally recognized, it is for the sake of common decency rather than for prevention of specific diseases.—*W. H. Frost.*

Sources of Milk Infection and Typhoid.—Milk supplies are, in general, exposed to contamination with human discharges, and in proportion as these discharges are likely to contain typhoid bacilli. Other things being equal, the likelihood that typhoid bacilli may be present in some of the discharges with which a milk supply may become contaminated is proportionate to the number of persons in dangerous contact with the milk supply. We may consider as in dangerous contact not only those persons who actually handle the milk, but all whose discharges might in any way infect the supply.—*W. H. Frost.*

# Bureau of Vital Statistics

F. L. WATKINS, M. D., *Statistician*

## PROCEEDINGS OF THE AMERICAN MEDICAL ASSOCIATION NEW YORK CITY, JUNE 4-8, 1917

### REPORT OF COMMITTEE ON WOMEN'S AND CHILDREN'S WELFARE

#### *Council on Health and Public Instruction*

Never, since my connection with the Committee on Women's and Children's Welfare, have I felt the pressure of responsibility so keenly as at the present time. Because of the vast destruction of human life throughout the warring nations, child conservation has become an economic necessity, and the health of women should be protected if for no other reason than that they may aid in the development of the children. Because of this serious situation our committee wishes to urge most earnestly the active co-operation of every member of the American Medical Association in two things: the further development of the baby health conferences, and the securing of an adequate vital statistics law in each State. Both of these activities have been most splendidly kept before the public by the Children's Bureau and the General Federation, and by co-operating with them, the Committee on Women's and Children's Welfare has been able to do its most effective work in 1916-1917.

Our last year started with a much clearer understanding of what is being done in the United States toward preservation of child life than we had ever been able to have before in the history of our work. Through the efforts of the Council on Health and Public Instruction of the American Medical Association, a conference was called, last October, of representatives from all the societies interested in child welfare. This conference met in Chicago, made a comparison of the work being done, and appointed a committee of six, with Miss Julia Lathrop as chairman, to map out a general program to be followed by all of the societies represented. The first tangible result of the work of this meeting is to be seen in a set of fifteen panels, ten of which were prepared by the American Association for Study and Prevention of Infant Mortality, and five by the Children's Bureau. These are printed by the American Medical Association, and are exceedingly clear and forcible in text, and attractive in form. The single copies are 15 cents and the entire set \$2, bringing them more nearly within the reach of those desiring them than the sets previously published, which have been often prohibitive in price, and not plentiful enough to rent.

Our co-operation with the Children's Bureau during the past years has always reacted most satisfactorily on the work of our own com-

tee. It has been our particular function to assist the bureau this year in its plans for a nation-wide baby week. To that end we have revised our pamphlet on baby health conferences and added to our files a record sheet for noncompetitive conferences, which is used and approved by the Children's Bureau. The following extract from the directions given for entrance to the baby department of one state, for 1917, explains the practical use to which this record sheet is being put.

#### CLASS NO. 172. NON-COMPETITIVE CLASS (Without Score Card)

2547—Boy, 36 months and under 48 months.

2548—Girl, 36 months and under 48 months.

A record sheet prepared by the Children's Bureau will be used. A full physical examination is made of each baby; a printed blank is filled out, giving the results of the examination notes with regard to the individual needs of each baby. This record sheet is given to the mother.

In this class no attempt is made to compare the development or condition of different babies; the object of the examination is rather to center the attention of the mother on the needs and needs of her own child, to teach in a practical way the facts with regard to the care of babies, and point out the sources of assistance in making or keeping the baby well. Treatment or prescriptions are given; where there is need for either, reference is made to the family physician or dentist, to specialists, or, where the parents can not afford adequate care, to clinics and hospitals.

No prizes are awarded but a ribbon will be given to each baby examined.

Perhaps the greatest new possibility for our committee in this year's work has come from our connection with the General Federation of Women's Clubs. Within that federation there is a department of public health which in its turn is divided into four divisions; one of these is child hygiene, and it has been my great opportunity, as chairman of that division, to submit a program and recommendations for the work of 1917-1918. This material appeared in the General Federation of Women's Clubs magazine for April, 1917, and will be incorporated in the handbook of the Committee on Public Health of the General Federation. Through these two avenues we are able to come in direct touch with 2,000,000 women of the United States. The program and recommendations follow:

There are only eleven States which already have an adequate vital statistics law. We recommend that these states work along lines suggested by their own state registrar; such as investigating the cause of their death rate, establishing child welfare stations, making surveys, working toward securing a child hygiene division either under their state board of health or university extension.

For the states which do not have an adequate law we submit the following program for the first day allowed us in the club year-book. May we keep constantly in our own minds that we rank with Turkey and China in not having adequate registration laws; that it is a shame to our national intelligence and pride that we can only guess approximately the number of deaths and births in our country, and that no efficient infant welfare work can be done until we know where the babies are and how many there are.

### BIRTH REGISTRATION

1. A spot map of localities showing results of test in birth registration (Census Bureau).
  2. Devices and campaigns to awaken interest (See "Birth Registration Test," Children's Bureau, Pages 4, 5, 6).
  3. Why the "model bill?" (See "Why Births and Deaths Should Be Registered," American Medical Association.)
  4. Co-operation with state and local health officers.
  5. Relation of birth registration to infant mortality. (See Infant Mortality, 1915, Children's Bureau. See Pamphlets issued by American Association for the Study and Prevention of Infant Mortality.)
  6. Birth registration and child labor. (See "Birth Registration Test," Federal Bureau of Investigation, "Study Course on Public Health," Program XIV, American Medical Association.)
- The second day in the calendar can be devoted to the question of baby health conferences, with a view to establishing permanent local, county, and state stations or bureaus.

## BABY HEALTH CONFERENCES

1. Demonstration of measuring babies; normal and subnormal types presented.

### *Suggestion to Committee*

Experience has shown that the most effective way to make these demonstrations count is to secure two babies, one as near the normal type as possible, the other with as many remediable defects as possible. The latter can often be secured from some charitable institution. One nurse and one doctor are necessary to conduct the demonstration. Score cards should be in the hands of the audience during the demonstration.

2. Discussion of score card and anthropometric table. See: American Medical Score Cards, American Medical Anthropometric Table. Record Sheet (same as used by Federal Bureau). Baby Week Campaign (issued by the Federal Bureau).

### *Suggestion to Committee*

If practicable, this topic should be combined with the explanations accompanying each measurement. If this is not possible, it should follow immediately. Questions and discussions should be encouraged from the audience. Under this discussion the necessity of parents having an anthropometric table can be brought home. For example, a child should, at a given age, weigh a certain number of pounds according to his height, and the circumference of his head, chest and abdomen should be proportionate; if not, the cause should be ascertained. This discussion is of utmost importance, as it is one that will lead most effectively toward the establishment of permanent conference stations.

3. Mental Development; Bi-net Tests above 3 years of age. Mental Tests below 3 years of age. (See: American Medical Score Card. American Medical Baby Health Conference, Pamphlet 5.)

### *Suggestion to Committee*

This topic is given because it is the part of the measuring and scoring least understood and most criticized. Practically every normal baby will respond in varying degrees of promptness and accuracy to the tests offered; but the subnormal or mentally backward child invariably fails to respond. The test, as it now stands, is far from satisfactory in marking the fine points of difference among normal children; but it is of greatest accuracy and value in determining the subnormal child's deficiencies. Both physicians and parents have mis-understood and under-valued these mental tests.

4. Care of Mother; Rural; Town; City (See: Prenatal Care, by Mrs. Max West, Children's Bureau. Maternal Mortality, by Dr. Grace L. Meigs, Children's Bureau Leaflet No. 1. Prenatal Care Record, by American Association for the Study and Prevention of Infant Mortality.)

### *Suggestion to Committee*

Especial attention should be called to the condition of mothers in rural districts and in small towns where tradition keeps the mother at her usual work until the birth of child and sends her back too soon afterward. Scarcity of servant help, and ignorance of results make this condition often as threatening as in the slum districts of the city where the mother must of necessity work in factories or away from home. Many times the actual physical labor of the mother in the rural districts equals that of the much-talked-of slum mothers, and the results on the child are less harmful only because partly counteracted by pure air and better food.

Distinct from these two days of regular club work on child hygiene, we wish to recommend most earnestly the observance of Baby Week. If the week set apart by the Children's Bureau is not advisable in the community, another may be substituted: if a week is impossible at least *observe one day*. By all means co-operate with the federal bureau in this matter. This bureau has a baby week pamphlet which gives suggestions suitable, by modifications, to any locality.

We feel that when these two lines of work are well accomplished and the results achieved, many other things for which our department stands, such as housing conditions, food supply and public utilities in municipal and rural life, will have received material aid.

In the localities in which the foregoing programs and suggestions are difficult to follow, we recommend "An Outline for Study Course on Public Health, prepared for the use of Women's Clubs" by a joint committee from the American Medical Association, and the Home Economics Department of the General Federation of Women's Clubs. The parts of this particularly suited to a child welfare program are: Program 3, Subject—"The Cost of Food." Section B, Program 4, Subject—"The Care of Food." Program 8, Subject—"Control of Communicable Disease." Sections A, B and D, Program 9, Subject—"Cost of Preventable Disease." Each of these is accompanied with a good bibliography. The outline can be obtained from the American Medical Association, 535 N. Dearborn St., Chicago, Illinois.

During the past year all orders for contests and conferences have been filled by Dr. Frederick R. Green, Secretary of the Council on Health and Public Instruction, from the Chicago office. From our own office we have sent sample material only.

\*   \*   \*   \*   \*   \*   \*   \*

In conclusion, we wish to call especial attention to the following classes in baby health contests, as those most effective in their remediable effects, and in consequence most desirable to center on: initial examination; improvement class; and non-competitive class, explained before in this report.

Again may we point to the fact that conservation of child life, health, and development has never been such an insistent factor in the world's history as at the present time. The difficulties and responsibilities of our committee have been daily borne in on us with increasing urgency in the last two years, and have grown especially heavy since the declaration of war by our own country. We, therefore, wish to express our appreciation to the Council for their sympathetic and unlimited support.

Respectfully submitted,

LENNA L. MEANES, *Chairman.*

M. L. TURNER, *Secretary.*



# Sanitary Engineering Notes

## BUREAU OF SANITARY ENGINEERING

GEORGE W. SIMONS, JR., *Chief*

Frequently numerous problems of an engineering nature affecting the public health of individuals or communities are proposed to the State Board of Health for their solution. Inquiries are received daily concerning water supplies, sewerage or sewage disposal problems—inquiries for advice. It is a well-known fact that the quality of a public or private water supply must be maintained at all times in order to fully protect the people using same from an epidemic resulting from a careless or accidental contamination. And furthermore the necessity for better sewage disposal is being more and more emphasized.

The Bureau of Sanitary Engineering stands equipped and ready to render investigating and advisory service to all the people and communities in the State on health problems assuming an engineering nature, including water supplies, water purification and treatment, sewerage and sewage disposal, drainage, mosquito extermination, refuse collection and disposal, plumbing and plumbing regulations.

The Bureau in addition invites cities and individuals to submit all plans of proposed work affecting any of the utilities above mentioned. A careful examination of all the plans may finally protect the community against inefficient sanitary installations and a waste of public funds.

The Bureau, besides its advisory services, maintains a complete laboratory for the analyses of waters and sewages, both bacteriologically and chemically. This service is also free to the citizens of the State:

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### SIGNS OF LIFE

Considerable activity will be noted this summer along sanitary engineering lines of endeavor. At St. Petersburg, in Pinellas County, steps are being taken to provide the city with a modern sewage disposal system, an improvement in keeping with the rapid progress the city has been heir to. During the past winter several detailed investigations were conducted by the Engineering Department of the Board for the purpose of deciding the proper method of disposal that the city should adopt. Recently a comprehensive report of the winter's investigations was submitted to the Commission. Before the tourist season of next year starts St. Petersburg will be fixed.

At Miami, steps are being taken toward the provision for a modern sewage disposal apparatus to eliminate the numerous sewers now entering Biscayne Bay. The work here will involve several difficult problems.

At Fort Lauderdale the citizens are considering the advisability of treating the city supply by filtration to make it more potable.

The Hotel Belleview at Belleair will soon install a liquid chlorine apparatus for the treatment of a lagoon water to be used for bathing purposes.

Chipley, in Washington County, will, this summer, undertake the installation of a modern sanitary sewerage system with consequent sewage disposal, also make several improvements in the water distribution system.

Palm Beach, West Palm Beach, Winter Haven and Clearwater are investigating the advisability of installing refuse incinerators for the destruction of all garbage and rubbish production.

The Florence Villa Hotel is planning a new sewage disposal and treatment plant to care for its liquid waste production.

St. Augustine will undertake, within a brief time, a remodelling of the present sewerage systems—collecting numerous private lines into one large municipal plan with subsequent disposal.

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### HEALTH PROTECTION

Some of these fine days the people of this city are going to receive an awful jolt unless immediate action is taken to remedy the condition of countless numbers of filthy and germ-breeding out-buildings with which Lake Worth is plentifully decorated. It is astonishing when we think that in a town which claims to be so modern and up-to-date open out-houses where disease germs originate are permitted to flourish without restriction.

As a protection to the public health the town commissioners should take the bull by the horns and pass such ordinances as will compel the careless residents to not only protect their health but that of the entire community. The State maintains a health department which is at all times ready and anxious to give expert advice. Officials of this department will gladly come to Lake Worth and confer with the officers of the town. The warm weather is here and with it may come an epidemic of typhoid or other fever.

What is to be done should be done at once.—*Lake Worth Herald.*

The State Board of Health commends such editorial comments as the above. This one shows that the citizens are being reminded of their surroundings, of their modes of living and health. We are ready to serve at any and all times.

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### ENGINEERING AND STATISTICS

Webster's dictionary says that science usually denotes a systematic and orderly arrangement of knowledge. When speaking of a science we generally think of chemistry, biology, or physics, which were probably studied in the early school days; also arithmetic, which is the science of numbers. But there are two other sciences, and the one of immediate interest in this article is statistics. Statistics is also a science, in that it presents to us mutually related facts by figures; the science of presentation by classified figures of facts. By means of these classified facts we are in a better position to see graphically the actual existing conditions of the communities in which we reside and thoroughly study and familiarize ourselves with the needs of any particular one which our arranged figures may show needs more intensive study. Vital refers to that which pertains to life; therefore, Vital Statistics are those applied to the lives of communities and nations.

During 1915 the Florida Legislature passed a model law creating a Bureau of Vital Statistics for the collection and compilation of all

data relative to births and deaths within the State. During the past year many valuable facts have been learned from these compiled data, and by its assistance we have been enabled to ascertain the exact status of our communities and note from which diseases the most deaths occur. The question of their relationship to Engineering now comes into consideration.

Sanitary Engineering has primarily to do with such public utilities as water supplies, sewerage, sewage disposal, and also problems of an engineering nature affecting the public health. Typhoid fever, dysentery and enteritis are sometimes conveyed by water from sewage contamination, also in many instances by flies from surface privies. Throughout Florida surface privies abound in great numbers in every state of delapidation, presenting to the sanitarian a sad sight. Flies appear in countless numbers. As a result of these open privies and with the fly prevalence, the above diseases are quite frequent. If a means can be arrived at for enforcing people to observe health laws in connection with excreta disposal the danger from all intestinal infections would be decreased. The import of the danger is made more clear by means of the data which the Bureau of Vital Statistics has available. Recently sets of figures were arranged and charts drawn showing the death rates per 100,000 people from intestinal infections during 1915-16 statistics from 106 municipalities. From this charted compilation the engineering department is immediately informed where to lay its greatest stress, and exert its greatest activities.

Vital Statistics are the barometer of healthfulness. A general of an army is advised of all the movements of his troops by messengers and telegraph and as quickly as the activities are reported graphic records are maintained on large charts or maps showing the exact relative positions of the opposing armies. Thus Joffre watched the Germans approach the Marne, and when the statistics began to look adverse the clamps were adjusted. Just as the charted map was to Joffre and the French generals so are the vital statistics a warning to the engineering department.

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**HELP US**  
**LOWER THE DEATH RATE!**

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## Laboratory Notes

### THE LABORATORY AND THE CITIZEN

The mere fact that the citizen has a lot to do with the laboratory of the State Board of Health may sound peculiar, it may not, especially if you have ever thought seriously about it. From very humble beginnings the laboratories of the Florida State Board of Health have grown to be the finest system of diagnostic laboratories in the country. The physicians have turned to them for assistance in diagnoses of obscure cases, and at times for advice, always for information. The citizens of the State have also looked to the laboratories for advice, not only medical, but along every conceivable line, even the manufacture of soap has been asked for, and obtained. All of which is as it should be, the laboratory should serve.

With the examination of specimens for the doctor it would seem that we have reached the limit of our usefulness, the amount of work which is required of us, some 40,000 specimens a year seems quite a task. It is and it isn't. Yet diagnoses should be more or less incidental to real constructive health propaganda. All prevention of diseases rest ultimately on the work done in some laboratory. Research work, expensive and laborious as it is should be of paramount importance. Unfortunately it is not always possible to do it with the funds which we have at our command. Still research work should be and is demanded by the citizens, the particular problem, whether an epidemic or an economic waste caused by disease, should be directed by one familiar with the work.

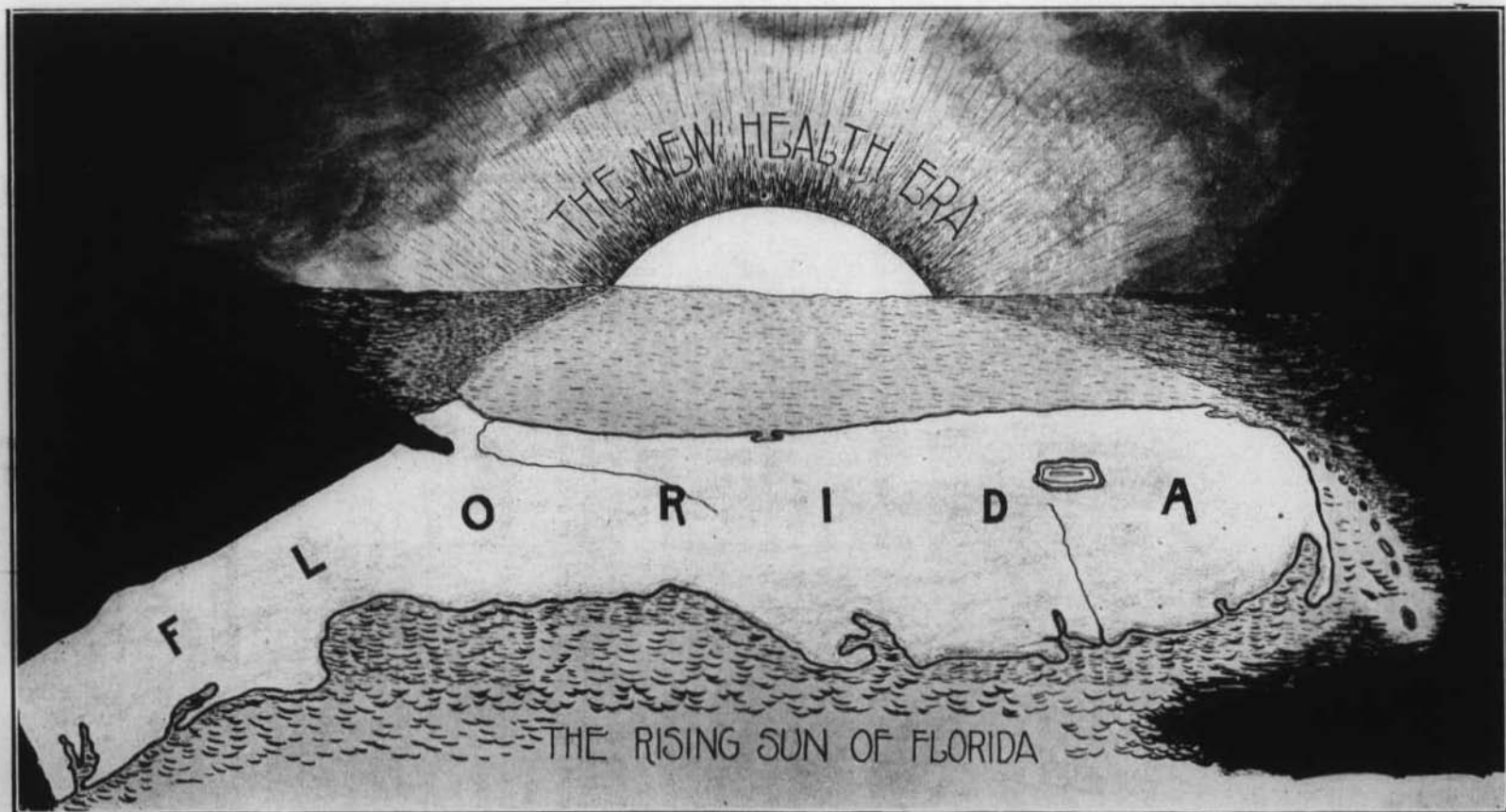
Food and drugs examination, especially in these times of high prices, are properly part and parcel of the work of the laboratory and in most States come under the supervision of the State Board of Health, unfortunately we cannot yet undertake that work as much as we would like to. But we're hopin'.

All of us are familiar with vaccines, smallpox, typhoid, typhus and the rest of them. Some half million or more of our young men will be rendered immune to various diseases as soon as they enter the active service of the United States Army. There are many more people that should be rendered immune to disease, especially typhoid fever. Not that anti-typhoid vaccine should in any way replace common sense sanitary measures, but as an extra precaution it is well to be prepared. The laboratories could furnish vaccine to the citizens, and it may be possible to do so in the future. We hope so.

With adequate facilities for research work, with proper nutriment to expand along lines which indicate a normal healthy growth, Florida should have in the near future not only the finest system of diagnostic laboratories in the country, but the most efficient and valuable system of laboratories of any State Board of Health.

Co-operation by the citizens of the State is essential in bringing this about, we have never yet found the citizens of Florida lacking in this respect.







HUMAN LIFE IS THE STATE'S GREATEST ASSET

# FLORIDA HEALTH NOTES



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## TYPHOID FEVER IN FLORIDA

The high typhoid rate in Florida, recently announced by the State Board of Health, has caused not a little comment. It seems to have struck many with surprise, in some cases, almost unbelievable. Others have been surprised that we would say anything about it, lest it should injure the State. A few have said I thought so, but most have said you are doing the right thing.

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One of the surprised ones was a doctor who merely hadn't thought. He had had about so many cases in his practice, and estimated that there were so many others, on the basis of which it was found, according to his own figures and estimates, his little town had had a typhoid rate nearly twice the rate for Florida. Then he gasped. But he didn't think the disease amounted to much in this State—didn't think the death rate anything like our estimates. *Now if that be true, it is all the graver, because knowing the number of deaths, we had counted ten cases of illness for each death. If the mortality rate is not that high, then we have more cases than we had counted. It is the number of deaths that we reckon from to find the approximate number of cases. Hence the lower mortality rate, the greater the number of cases to produce the number of deaths that we know occurs. But continuing, the doctor had had nine cases this year, and one death, from which his mortality rate is seen to be about 11 per cent. He just hadn't thought of it that way.*

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Saying nothing about it for fear of injuring the State—that is the same old story. It has come up a thousand times. It comes up every time calamity does. That was the cause of the general row the last time we had yellow fever in the State—to tell it would injure the State. When citrus canker hit the orange trees of Florida, the papers refused to discuss it. A certain local paper explained his attitude by saying that he would like to publish it, "in milder form" but that his advertisers threatened to freeze him out if he did. It would injure real estate. Even today people say it should not have been advertised so widely, although that was the very thing that enabled the citrus growers to help to save the industry. To have, ostrich-like, stuck our heads in the sand, would have cost Florida over two hundred million dollars worth of citrus groves. *The thing to do in the presence of calamity is to tell the truth, and meet it like men. That is what we propose to do in the presence of this high typhoid rate. We believe in the manhood of Florida. We believe that when they know the true status of affairs they will arise, almost to a man, and instead of trying to cover this up, will help to wipe it out.*

The question has been asked by well meaning people if we *can* bring the death rate down. Isn't it necessarily higher in the South than the North? A little story will answer that question. A few years ago a man by the name of Bonney living, I believe, in Jacksonville, got down a big book off a high shelf and read in it that *Jacksonville, Florida, had the highest death rate from typhoid fever of any city in the United States*. Then Mr. Bonney went out and proclaimed it from the house-tops. He had little folders printed and sent them broadcast all over the United States, telling about the very high death rate from typhoid fever in Jacksonville, Florida. He quoted the United States Census figures to show that he was telling the truth. And soon Mr. Bonney's articles began to be quoted in the Western papers and elsewhere, until the people of Jacksonville were very wroth, and some would have stoned him, but that it was not proper to do so. At length, seeing that there was only one way to stop that unpleasant publicity, *a new board of health was organized, a whole-time health officer employed, adequate appropriation made to meet health organization, and presto! Change! THE TYPHOID DEATH RATE FOR JACKSONVILLE DROPPED TO THE NORMAL IN A FEW MONTHS—AND WHAT IS MORE, IT HAS STAYED DROPPED*. Now just who was it that brought that typhoid rate down? Of course it was the Board of Health, but behind that it was the city council, and behind that, the Board of Trade and the Woman's Club, but behind that—Charles L. Bonney. And he did it by telling the truth.

This Jacksonville incident has taught: 1. That the typhoid rate in Florida need not exceed the rate in the United States. 2. That efficient public health administration adequately supported will bring it down. 3. That Jacksonville was willing to give that support as soon as Jacksonville understood. Now the question is: **WILL FLORIDA DO THE SAME THING?**

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It's easy enough to talk about lowering the death rate, but how is it to be done? That is the question. Talk will not—that is certain. It has been tried out a thousand times. It will take action to do it. More than that—it will require intelligent, well directed action. Intelligent, because we must first **KNOW** where our typhoid comes from, and then we must **AIM** with marksman-like precision at the cause.

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There are two ways of preventing typhoid fever—one is to prevent getting infected and the other is to immunize one's self against it. But these two ways are not of equal importance—not by a jug full. Get vaccinated of course—that is for your own protection. But it is impossible to vaccinate enough people to protect the State. It would take about a million vaccinations, and the vaccine alone costs about twenty cents each, and it costs anywhere from a dollar and a half to five dollars to have it administered—the cost alone by

this method is absolutely prohibitive. You see from this that it would take at least three million dollars to protect the State against typhoid by vaccination. Not only that—vaccination protects only against typhoid among the intestinal diseases. You see we have 175 deaths annually from intestinal diseases, only twenty-five of which are from typhoid. Vaccination would do no good for the other 150. From which it is seen that if we were to wipe out typhoid by vaccination, we would still have 150 deaths a year from intestinal disease, whereas the United States has only 87. No, no. Don't try to wipe it out by vaccination. But remove the cause. Now the cause is the open privy, or, what is worse, none at all. The proof of this is that wherever there are open privies and flies, typhoid prevails, and wherever that is corrected, typhoid ceases.

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Let me tell you the story of Jacksonville again, for it pleases Jacksonville to hear it, and pleases me to tell it, and every town in Florida will do well to learn the lesson that it teaches. A few years ago Jacksonville had open privies galore. And she had a typhoid rate in 1910 of 103 per hundred thousand population. Now that was going some. Think of that as compared with say Boston, with a death rate of about 6 per hundred thousand the same year from typhoid. Then Jacksonville roused up, and cleaned up, and down, down, down went the death rate from typhoid fever—down from 103 in 1910 to 67 in 1911, to 31 in 1912—then it went up a little—36 in 1913, 41 in 1914, 21 in 1915 and 13 in 1916.

H. B.

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## TYPHOID HAS BUT ONE SOURCE

### Human Body Source of Typhoid Germs

"Typhoid fever has one and only one source," says the State Board of Health, "the human intestines of a typhoid patient or carrier. Animals other than man do not have typhoid. In the human intestines the typhoid bacilli grow and multiply and are passed out in the excretions of the body. Human excrement is, therefore, the direct source of all typhoid. Succeeding cases of typhoid fever are caused only by these germs finding their way back into the human body. In other words, the germ causing typhoid must be either eaten or drunk. Foul odors or decaying animal or vegetable matter have nothing to do with the spread of typhoid directly. They affect only indirectly by furnishing breeding material for flies.

Flies are the chief spreaders of typhoid, though fingers, food, water and milk play no small part in its spread. To control human excrement is practically to control typhoid, or to control flies and insist on clean food and drink is to be practically safe from typhoid, but where none or only a few of these things exist, the next best safeguard is to be vaccinated against typhoid.

"While it is exceedingly advisable," says the Board, "to be vaccinated against this disease on having been exposed to it or on going where the infection is likely to be met, as on vacation tours or outing expositions, it is all the more advisable to be vaccinated as a general precaution and as another form of life insurance. The number of the typhoid carriers have proved to be many and no man can spot them till after they have done their work."—North Carolina State Board of Health, Press Article, August 3, 1917.



## A PLEA FOR DAILY BEDSIDE DISINFECTION INSTEAD OF TERMINAL FUMIGATION

Opinions formerly held by public health authorities regarding disinfection and fumigation have been changed largely by new discoveries and tests made during the past few years. At least they have come to look at these processes from a new angle; and it has come to be considered, as one result, that proper and constant bedside disinfection makes terminal fumigation unnecessary.

Nevertheless we find that this fact is largely unfamiliar to the average person, who has had no instruction on the subject, and that there still is a popular misconception as to the meaning of the terms, accompanied by a well marked, but false, idea of their relative values.

First we need to know what is meant by disinfection and by fumigation and just what is the difference between them.

By disinfection is meant the destruction or killing of those agents which cause disease. This may be done by such chemical means as bichloride of mercury, carbolic acid and the cresols, as well as by physical means such as sunlight, heat and the like, or by the gases.

Fumigation means the destruction by gases, or fumes, of the disease causing agents including rats, vermin, mosquitoes, insects and other small forms of animal life. For the present purpose, however, we will not concern ourselves with the destruction of these latter forms of carriers, but will limit fumigation to the killing with fumes or gases of disease-causing germs.

To clearly understand proper disinfection and fumigation we need to know something concerning communicable diseases and the methods by which they are acquired. By the term "communicable" is meant diseases that are communicated from one person to another, such as infectious or contagious diseases. We must keep in mind that the basic principles of such diseases are:

First—They are caused by certain well defined or particular agents, (bacteria, which are minute vegetable cells, protozoa or animal cells, etc.).

Second—These diseases never arise spontaneously but always come from some preceding case.

Mere presence of disease germs in the human body does not necessarily mean that the person has the disease, because for this to occur, the germs must be present in sufficient numbers and be virulent or strong enough to grow and multiply. Hence, if their numbers can be diminished, or their virulence weakened by disinfectants, the person stands better chance to escape.

Communicable diseases are contracted most commonly by contact infection, which means that the germs are transferred by other persons, through the operation or habit of putting soiled fingers to mouth, use of the public drinking cup, chewing gum, candy and fruits. A person coughing and spraying the atmosphere with

sputum causes a dangerous area in which contact infection may occur. In fact anything which carries to a well person in a more or less direct manner the disease-producing germs contained in discharges from the sick is an example of contact infection. Flies also are another important agency for the carrying of disease germs from infected objects to foods.

Terminal fumigation at the end of a disease means simply thorough cleansing and disinfection by any and all processes. Formaldehyde gas, the only satisfactory fumigant, to be effective requires a chance for the gas to reach everything in the room (including objects contained in drawers and the bedding) a high percentage of moisture in the air, a temperature of not over sixty degrees and the closing of all openings, such as keyholes, window cracks and other outlets through which the gas might escape before accomplishing its purpose.

On the other hand, daily bedside disinfection not only assures the constant destroying of germs taken from the patient that might endanger other persons, but removes the necessity for what could prove an unsuccessful fumigation at the end.

In conducting a daily bedside disinfection, say in a case of diphtheria, we want a large open room with windows to allow the constant disinfectant action of air and sunshine. The doors and windows, however, must be screened to prevent fly transference of the disease. All persons except the nurse must be kept outside. She must have a solution of bichloride of mercury in which to wash her hands after handling the patient or articles soiled by his discharges. The latter must be caught on cloths, as they come from the patient's mouth, nose, etc., and burned in the room, the outlet of the discharge being covered each time he sneezes or coughs or clears his throat.

If it is not practicable to burn these cloths in the room, immerse them in a five per cent. cresol emulsion until they can be burned. Discharges from the patient's intestines and bladder must have the cresol solution added in an equal part and be permitted to stand covered for two hours before being taken from the room to be buried. Articles, such as pillows, sheets and towels, as well as spoons and dishes, used in the room must be immersed in the cresol solution before being carried away. Water used for bathing the patient is to be disinfected by heat or chemicals before disposal. Scraps of food coming out of the room are to be burned promptly, and furniture and other like objects accidentally soiled by discharges must be disinfected with a suitable solution.

At the end of the patient's confinement, a simple scrubbing in addition to the air and sunshine, which has been constantly applied to the room, is sufficient.

R. D. T.

## Here and There

The teachers and superintendents of public instruction had a week of it in Gainesville, ending July 27th. During the week several howitzers were touched off, among them, Dr. J. L. McBrien, of the Bureau of Education, Washington, D. C. Every time Dr. McBrien opens his mouth, something falls that is worth while.

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Also from the Bureau of Education came Miss Belva Cuzzort. She is not a doctor, she is not a nurse, but she is teaching public health, in the public schools. The doctors are a little chary of laymen trying to teach public health matters—nurses *know* laymen can do it. They ought to meet Miss Cuzzort. It would be good for them.

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Doctors and public health people generally don't admit that laymen can teach public health matters, but they do contend that the layman ought to know such things. All our public health education is based upon the assumption that layman if he is intelligent enough and tries hard enough and works at it long enough, can learn a little about it. Why can't he teach that little? Again I say, meet Miss Cuzzort.

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To instruct a Mayor to screen the privies is one thing—to camp on the trail till it is done is another.

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The District Health Officer's usefulness can be accurately measured by the number of sanitary privies he gets installed.

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Dade County has detailed a teacher to work with the District Health Officer. St. Johns has a district nurse, and a dental clinic. How many others want to run in Dade and St. Johns' class?

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### "KEY WEST CLEAN-UP"

The Social Hygiene Bulletin, New York, makes this announcement:  
**"Key West Segregated District Closed."**

"The segregated district of Key West, Florida, was closed on June 27, 1917, by the sheriff of Monroe County upon orders from Governor Catts. This action resulted from information laid before the Governor that vicious conditions, including both prostitution and the sale of alcoholic drinks, were working damage to the men at the United States Army Post and Naval Station in that city. The local authorities were making an attempt at regulation and medical inspection; but the summary closing of the district and the further action of the Governor against the liquor traffic offer one more proof that segregation and regulation fail entirely to supply the conditions which the Army and Navy Departments are insisting upon in places to which men in training have access."

"The ice box holds the family food supply during the summer months. It plays an important part in keeping the food in good condition; but only when kept sweet and clean. Don't forget, then, that the neglected ice box is a menace to the family's health."

"Uncle Sam cannot use men for soldiers who have defective teeth or faulty vision. These defects are also a serious handicap in any calling."

Day by day we are coming to sense more keenly the problems we face, as a State and Nation, in entering the war. The commissions from the several governments which have visited us, military men who have left their places in trenches or hospitals for brief furloughs among us, Americans who have spent weeks or months on the battlefields as observers—all are giving us new views. We are beginning to grasp the enormity of the tasks; to realize that, in a large measure, we must change our habits of life to meet the changing conditions. We long have been characterized as a "wasteful Nation" and "Let Nothing Be Wasted" is the admonition now given us. Last year, in New York State outside New York City, there were 72,932 deaths. Many of these deaths were preventable. This is waste, indeed, and we must each of us do what we can to stop it. Fortunately, the science of preventive medicine makes the task comparatively easy, for we know that just so far as we apply the accurate, scientific knowledge at our disposal, just so far will we secure positive and definite results. The New York State Department of Health is organized to supply that knowledge, through its administrative heads, division chiefs, sanitary supervisors and local health officers. Publications cover many subjects and are to be secured upon request. Community health problems are studied and assistance given with special reference to war conditions. Do not permit yourself, your family or the community in which you live to risk preventable disease when assistance is at your command. Your country calls upon you to keep well. Enlist in the war against disease, fight intelligently and you, the State and Nation will gain by your victory.—"Monthly Bulletin, New York State Department of Health."

"If you want to be miserable, think about yourself, about what you want, what you like, what respect people ought to pay you, and what people think of you."—Charles Kingsley.

"I think that saving a little child  
And bringing him to his own,  
Is a durned sight better business  
Than loafing around the throne."

—John Hay—"Little Breeches."

"Health Notes" asks the hearty co-operation of all doctors in the State with the Director of the Bureau of the Census in Washington, in making definite statements upon death certificates. We would appreciate more accurate information from all causes of death, but have been asked to publish this extract from circular letter sent out by the Bureau of the Census:

"More accurate and definite statements of the occupations of decedents should be written upon death certificates. Until this is done mortality statistics by occupations will continue to be unsatisfactory.

"The Bureau of the Census is planning for the near future a monograph on tuberculosis. How much more valuable this monograph will be if it is possible to show accurately the occupations of decedents.

"As a physician you appreciate the importance of such statistics. As a physician you are by education better qualified than the ordinary informant to understand a proper statement of co-operation.



"Will you not, therefore, take pains to see that the occupation items upon each one of your death certificates are properly supplied?"

"Thanking you for your co-operation, I am,

"Very truly yours,

SAM. L. ROGERS, Director."

## FLY POISONS

"The approach of the fly season gives especial interest to a bulletin by Phelps and Stevenson, of the Hygienic Laboratory of the United States Public Health Service. While our main efforts should be directed to the elimination of breeding places, we should not neglect other methods of ridding ourselves of the pestiferous flies. The fly poisons ordinarily marketed are poisonous not merely to flies, but also to other forms of animal life, babies not excepted. Most of them contain arsenic. Experiments have been carried on in the Hygienic Laboratory in the endeavor to determine if less dangerous materials might not be used to equally good advantage. The results indicate that at least two substances are available which, while much less dangerous, are equally efficacious. These are formalin and salicylate of soda.

"Formalin is a 40 per cent. solution of formaldehyde gas in water. One to two full teaspoons of formalin to an imperial pint of water gives the most satisfactory results with this substance.

"The salicylate of soda should be used in the proportion of about three and a half to four teaspoonsful to the imperial pint of water.

"These solutions may be exposed in shallow dishes, or a device described by the authors may be used. 'An ordinary, thin walled drinking glass is filled or partially filled with the solution. A saucer, or small plate in which is placed a piece of white blotting paper the size of the dish, is put bottom up over the glass. The whole is then quickly inverted, a match placed under the edge of the glass, and the container is ready for use. As the solution dries out of the saucer the liquid seal at the edge of the glass is broken and more liquid flows into the lower receptacle. Thus the paper is always kept moist.'

"Experiments with sticky fly papers showed that the best results are obtained from mixing one part (by weight) of castor oil and two parts of white rosin. This mixture is heated over boiling water (as in a rice boiler) until fluid, and then spread on squares of unsized manilla wrapping paper."—Halifax Quarterly Bulletin.

Thirty years ago people, even doctors, didn't speak of "appendicitis" (long i please) nearly so glibly as they do now. In fact the word hadn't been coined. People had to die of such common-places as "inflammation of the bowels," when now they just run off to the hospital and have the appendix yanked out and the "innerds" all mended, "while you wait."

It was in 1887 that Dr. Braddon of London, (I think he must have been a famous surgeon of his time), reported a case of inflammation of the cecum—the cecum is the big loose end of the gut that the appendix grows to—from which the patient died. The excuse that Dr. Braddon made for reporting it was that there was pus found in the appendix after death. He had found in the literature that a gooseberry pip had lodged in one appendix and set up trouble, and that a fig pip had lodged in another, but he had not found any record of pus. He concluded that the "vermiform appendix" was not necessary to life because, only man, the orangoutang, and the wombat, have such frills in their insides. And he wondered what would be the result if the "vermiform appendix were removed" in cases of that kind.

This in 1887, please. We've gone some since then.



## Bureau of Vital Statistics

F. L. WATKINS, M. D. *Statistician*

### NOTIFIABLE DISEASES

It is impossible to do public health work; that is, prevent sickness and loss of life, without having a knowledge of the disease or conditions which affect the health of the people.

In order that the State Board of Health may have knowledge of the prevalences of preventable diseases in every section of the State, rules and regulations, governing the reporting of all such diseases, were enacted by the State Board of Health at the annual session February 13, 1917. Under Section 2 of these rules is listed the diseases which are notifiable.

The responsibility for reporting such diseases is placed on the physician in attendance. A careful reading of Section 3 shows the data which is required to be reported for each notifiable disease, and it will be further noted that such reports are required of all persons suffering from or afflicted with any of these diseases; or suspected to be suffering from or afflicted with any of the diseases listed.

Such reports are required to be made six hours after making a diagnosis of suspected diseases. This is required of all of the diseases listed except Asiatic Cholera, Diphtheria, Leprosy, Bubonic Plague, Acute Poliomyelitis (Infantile Paralysis), Scarlet Fever, Smallpox, or Yellow Fever.

In a case diagnosed as one of the preceding diseases, immediate notification is required. The rules provide that such notification shall be made by wire, the wire to be paid by the State Board of Health.

Notification of a suspected case of any of the diseases, which are notifiable, is required to be made to the State Board of Health by every teacher and every person in charge of any public or private school, including Sunday School.

Any person who shall fail, neglect, or refuse to comply with the rules governing the reporting of notifiable diseases shall be deemed guilty of a misdemeanor and upon conviction shall be required to pay a fine of not less than \$5.00, nor more than \$100.00, as provided in Section 22 of Chapter 6892 (No. 86), Laws of 1915.

Morbidity reports will not be required until about November 1, 1917, prior to which time every physician in the State will be supplied with a copy of the rules governing morbidity reports, cards on which to report each individual case, and full instructions regarding such reports.

## RULES AND REGULATIONS OF THE FLORIDA STATE BOARD OF HEALTH, GOVERNING MORBIDITY REPORTS

SEC. 1. It being the duty of the State Board of Health to keep currently informed of the occurrence, geographic distribution, and prevalence of the preventable diseases throughout the State, and to prevent the spread of these diseases, and for that purpose the following Rules are adopted in accordance with power conferred on the State Board of Health, as provided by Chapter 6892 (No. 86), Laws of 1915.

SEC. 2. The following named diseases and disabilities are hereby declared to be dangerous to the public health and made notifiable and the occurrence of cases shall be reported as herein provided:

### GROUP 1—COMMUNICABLE DISEASES

Anthrax	Mumps
Chicken-pox	Ophthalmia Neonatorum (conjunctivitis of new-born infants)
Cholera, Asiatic (also cholera nostras when Asiatic Cholera is present or its importation threatened).	Paratyphoid Fever
Dengue	Plague
Diphtheria	Pneumonia (Acute)
Dysentery	Poliomyelitis (Acute Infectious)
(a) Amoebic	Rabies
(b) Bacillary	Scarlet Fever
Favus	Smallpox
German Measles	Syphilis
Glanders	Tetanus
Gonococcus	Trachoma
Hookworm Disease	Trichinosis
Leprosy	Tuberculosis (all forms, the organ or part affected in each case to be stated)
Malaria	Typhoid Fever
Measles	Typhus Fever
Meningitis:	Whooping Cough
(a) Epidemic Cerebrospinal	Yellow Fever
(b) Tuberculous	

### GROUP 2—MISCELLANEOUS DISEASES

Beriberi	Cancer	Pellagra
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*Provided*, That the State Board of Health may from time to time, in its discretion, declare additional diseases notifiable and subject to the provisions of these Rules and Regulations.

SEC. 3. Every person who in the State of Florida treats or examines for the purpose of diagnosis or treatment any person suffering from or afflicted with, or who suspects that any person treated or examined by him is suffering from or afflicted with, any of the diseases made notifiable by the preceding section, shall report such

case to the State Board of Health within six hours after making a diagnosis or suspecting the disease to be one required to be reported. Said report shall be transmitted in writing on a blank form provided by Section 1 of these Rules and Regulations; said report shall give the following information which is necessary for the protection of the public health and welfare:

- (1) Date when the report is made.
- (2) The name of the disease or suspected disease.
- (3) The name, sex, color or race, and the county and municipality or voting precinct in which the patient is located at the time the diagnosis is made.
- (4) Age, occupation, school attended, and place of employment of the patient.
- (5) Number of adults and of children in the household.
- (6) Source or probable source of infection or the origin or probable origin of the disease.
- (7) Name and address of the person making the report.
- (8) If the disease is, or suspected to be, smallpox, the report shall, in addition, show whether the disease is of the mild or virulent type and whether the patient has ever been successfully vaccinated, and if the patient has been successfully vaccinated, the number of times and dates or approximate dates of such vaccination.
- (9) If the disease is, or is suspected to be, typhoid fever, scarlet fever or diphtheria, the report shall show whether the patient has been or any member of the household in which the patient resides is engaged or employed in the handling of milk for sale or preliminary to sale.

*Provided*, That if the person making the report is unable to secure any item or items of information mentioned in Paragraphs 4, 5, 6 and 9 of the section without independent inquiry he shall state that fact on the report, by writing the word "Unknown" after each item for which the information cannot be obtained.

Employees of the State Board of Health shall be permitted to make an investigation of the case and secure the information; and it shall be the duty of any person interrogated in relation thereto to answer correctly and to the best of his or her knowledge all questions put to him or her by any such employe which may be calculated to elicit any information needed to verify or complete any report of a case of a known or suspected notifiable disease or to enable measures to be taken to prevent the spread of any such disease.

If the disease is, or is suspected to be, Asiatic cholera, diphtheria, leprosy, bubonic plague, acute poliomyelitis (infantile paralysis), scarlet fever, smallpox, or yellow fever the person required to make the report shall immediately wire the State Health Officer, collect, giving name and place of person, and the disease from which he suffers, or is afflicted with, or is suspected to be suffering from, or afflicted with.

SEC. 4. The requirements of the preceding section shall be applicable to persons attending patients ill with any of the notifiable diseases in hospitals, asylums, or other institutions, public or private:

*Provided*, That the executive officer of any institution, public or private, may designate in writing an officer or employe of such hospital, asylum, or other institution to report in place of the attending physician or other person treating or examining the patient in cases of notifiable diseases occurring in or admitted to said hospital, asylum, or other institution in the same manner as that prescribed for persons treating or examining patients. When designation has been made as above provided, it shall be the duty of such designated officer to report all cases of notifiable diseases occurring in or admitted to such hospital, asylum, or other institution in same manner as that prescribed for persons treating or examining patients.

SEC. 5. Whenever a person is known, or suspected, to be afflicted with a notifiable disease, or whether the eyes of any infant two weeks of age becomes reddened, inflamed, swollen, or contains an unnatural discharge, and no physician is in attendance, an immediate report of the existence of the case shall be made to the State Health Officer by the midwife; if no midwife is in attendance, said report shall be made by the father, mother, or other person in charge of the patient, each in the order named.

SEC. 6. Every teacher and every person in charge of any public or private school, including Sunday schools, shall report immediately to the State Health Officer each and every case which he or she knows or suspects to be a case of a notifiable disease in persons attending or employed in his or her school.

SEC. 7. The written reports of cases of notifiable diseases required by these Rules and Regulations of persons treating or examining persons afflicted with disease shall be made upon blanks and forms supplied by the State Health Officer.

SEC. 8. Any person who shall fail, neglect, or refuse to comply with or who shall violate any of the provisions of these Rules and Regulations shall be deemed guilty of a misdemeanor and upon conviction thereof, shall be punished by a fine of not less than Five (\$5.00) Dollars, nor more than One Hundred (\$100.00) Dollars, as provided in Section 22 of Chapter 6892 (No. 86) Laws of 1915, under which authority all Rules and Regulations governing morbidity reports were adopted.

SEC. 9. These Rules and Regulations shall take effect June 1, 1917, and all rules and regulations or parts of rules and regulations inconsistent with the provisions of these Rules and Regulations shall hereby repealed. No provision of these Rules and Regulations shall be construed as an attempt to appeal or amend any statute, or part thereof, requiring the reporting of diseases.

(Adopted by the State Board of Health at its annual meeting February 13, 1917).



## Bureau of Diagnostic

B. L. ARMS, M. D., *Chief.*

### HEALTH DEPARTMENT LABORATORY

#### The Need For Their Careful Supervision

Recently in a city in New England an unusual number of diphtheria were recorded.

Study of the cases showed that the diagnoses were based on laboratory examinations. Further inquiry revealed that during the period of the unusual prevalence the examination of diphtheria cultures in the laboratory had been carried on by two different men, the usual bacteriologist and a temporary substitute who did the work part of the time. The findings of these men differed widely. The substitute bacteriologist did the work from May 27 to June 2, and of forty-six specimens submitted for diagnosis he found thirty-three positive, twelve negative, and one liquefied.

From June 4 to June 16, inclusive, the regular bacteriologist was on duty, and of fifty-one specimens examined he found eight positive and forty-three negative.

From June 18 to July 7 the substitute was again on duty, and of 104 specimens examined he reported seventy-seven positive and twenty-seven negative.

From July 8 to 10, inclusive, the regular bacteriologist was on duty, and of eighteen specimens examined he found two positive and sixteen negative.

The apparent prevalence of a considerable outbreak of diphtheria was evidently due to the inexperience and lack of training of the substitute. In this connection one is reminded of the bacteriologist of the health department of a large city who, instead of examining his diphtheria specimens, threw them into the waste basket and marked the reports negative, a practice that was without serious result until a diphtheria epidemic assumed unusual proportions and was discovered only by accident.—*Public Health Reports*, August 3, 1917.

The Florida State Board of Health is very fortunate in securing the services of Dr. B. L. Arms as Director of the Laboratories of the State Board of Health.

Doctor Arms, after graduating from the University of Vermont, served one year in the Pathological Department of the Boston City Hospital. Following this service, he spent six years in the Boston City Laboratory, and during the last two years of this period he had charge of the Laboratory. He served as State Bacteriologist for Oregon, and later was connected with the Medical Department of the University of Oregon. During the two years following he was in charge of the Department of Preventive Medicine at the University of Texas. He served one year as Chief Bacteriologist of the Laboratory of the Alabama State Board of Health, resigning this to accept the position with the Florida State Board of Health.



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## Sanitary Engineering

GEORGE W. SIMONS, JR., *Chief.*

### FOOD WASTE VS. GARBAGE FED HOGS

At this critical time in our country's history when every effort is exerted to minimize waste we should hesitate and consider the quantity of our own food waste and one way in which it can be utilized with a resulting profit and production of additional food. Recently Congress passed the Food Control Bill and the President has appointed a food commissioner who will soon become active—even now before the machinery of the law is effective we hear the slogan, "Hooverize."

Annually Florida with an average population of one million people wastes approximately 200,000,000 pounds of food in the form of garbage. This waste food is carried to the dump heap or incinerator and disposed of without any further regard for its inherent value; 200,000,000 pounds of food, or 100,000 tons is an amount of no small consequence. How can we save this waste and reclaim part value for the present loss?

Feed garbage to PIGS is the reply. Garbage fed pork is to some very repulsive but sound sense does not show why such a feeling should exist. In various parts of this country there are in operation numerous municipal and private garbage piggeries producing annually a great amount of pork. In the northeastern part of the country one of the largest and most well known hotel systems operates its own piggery for the purpose of furnishing its tables with pork.

One of the largest piggeries in the United States is the one located at Grand Rapids, Michigan. Here all hogs are inoculated with a serum-virus with a resulting remarkable success. Other piggeries are located at Denver, Los Angeles, Kansas City, Haverhill, Massachusetts.

Garbage fed pork is not or should not be objectionable. Dr. Chapin, the eminent Health Officer of Providence, Rhode Island, states: "Feeding garbage to swine will not cause disease, and during an experience of nineteen years I have never found a case of sickness that could be thus explained." There is no danger from the system under proper operation and handling. A prompt handling of the garbage to prevent unnecessary fermentation and the use of the serum will prevent any disease and trouble.

How about the quality of garbage fed pork? During 1913, in St. Joseph, Missouri, out of 2,276 hogs sold only eleven were condemned by the U. S. Government meat inspectors, an average of 0.48% of 1%. Out of 2,047 hogs marketed in Providence, Rhode Island, only two were condemned by Federal inspectors. Accurate

figures in one city indicate that the value of the garbage fed to about \$5.00 per ton of garbage fed. Applied to Florida we see readily that a reclamation of \$500,000 effected annually by garbage fed hogs.

Again quoting from a recent article by Dr. Chas. H. H. King of garbage to hogs makes wholesome pork and of high quality which brings a good price and does not cause any harm can be done with little offense. It is the most economical method of disposing of garbage. It brings up and maintains soil fertility. There is an impending shortage of food. Shall we take away from those who cry 'unsanitary!' but give no reason, and destroy a partially utilize a valuable food supply, or shall we dispel inherited prejudices by sound logic and make good for a million years out of what is now so often worse than wasted?"

### SANITATION OF SWIMMING POOLS

Swimming pools, both indoor and outdoor, are growing in numbers and popularity all over the United States. The importance of the swimming pool as an adjunct to our better physical welfare is being further recognized by schools, clubs, Y. M. C. A.'s, and other institutions interested in the fostering of such athletic sport. For those who cannot gain admission to and cannot afford the private pool, the public swimming pool is provided and it, too, is attracting considerable attention and is becoming very popular. Consequently, because of the widespread and growing uses of these pools their hygienic conditions must be maintained on a high plane.

The pools generally are constructed of concrete, rectangular in plan, sloping slightly from a shallow to a deeper end, and as a rule possessing a capacity for about 75,000 to 80,000 gallons of water. The water is sometimes changed daily, sometimes weekly, and in other instances is filtered continuously and oftentimes further treated constantly with a sterilizing agent such as chloride of lime.

The possibility of contracting infections through the medium of swimming pools is obvious, and such infections can be classed as (1) intestinal, (2) aural, (3) ocular, (4) venereal and sometimes a fifth respiratory. Skutch has shown where an epidemic of a venereal disease was spread by means of a swimming pool; Baginsky and Maier have shown where typhoid fever was contracted from an infected pool, and other cases are on record tending to prove that eye and ear, and perhaps respiratory diseases have been conveyed by this medium. Therefore the significance of the cleanliness of the pool and also the cleanliness of the bathers is to be noted.

After a pool is filled for the first time, the first bather contributes impurities and these are increased as long as no disinfection or change of water is attempted. Particles of hair, skin, thread, organic matter, salts and other impurities are being constantly added to depreciate the original water.

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...d would be for a sufficient supply of water, so ...d be added as was continuously passing out of the ...shing the supply and keeping it fresh. Because of ...r and pumpage this method is seldom realized. Next ...thod comes the one where the water is changed daily, ...a pool of good quality at all times for bathing pur- ...ot over contaminated by use.

...water is allowed to remain in the pool for a period longer ...day it should be treated daily with some form of sterilizing ...chloride of lime or copper sulphate. In addition the sides ...pool and bottom should be cleaned thoroughly, if possible, ...a vacuum squeegee. A pound or two of chloride of lime placed ...cloth sack and pulled through the water will be very effective ...reducing the bacterial count.

Urinals and showers should also be provided at every pool and previous to entering the water every bather should be required to take a soap shower. In this manner much contamination contributed by the unclean body would be eliminated. Furthermore a shallow trough should be installed around the edge of the pool for the purpose of intercepting any floor drainage and as an expectorating trough also.

## ANNOUNCEMENT

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This copy of the Health Notes is designated as Vol. XII, No. 6. The editions for the months of June and July, which would have carried the numbers 6 and 7, were not published, but in accordance with postal regulations that when issues are omitted, the serial numbers must be preserved, this copy is given the date of August, 1917, No. 6.

FLORIDA 1916

DEATH RATE PER 100,000 POPULATION

75

100

125

150

25

50

TUBERCULOSIS (ALL FORMS) 164.5

DIARRHOEA AND ENTERITIS (under 2 yrs.) 59.3

Diarrhoea and enteritis  
(2 yrs. and over) 34.0

Dysentery 27.0

Typhoid 25.0

U. S. REGISTRATION AREA 1915

TUBERCULOSIS (ALL FORMS) 143.8

D. and L.  
Yrs- 12.2  
Typhoid  
12.4

Diarrhoea and enteritis (under 2 yrs.) 58.7

F. J. W. H. H. H.



HUMAN LIFE IS THE STATE'S GREATEST ASSET

# FLORIDA HEALTH NOTES



OFFICIAL BULLETIN

PUBLISHED MONTHLY BY THE

STATE BOARD OF HEALTH

EDITED BY THE SCIENTIFIC SECRETARY

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# FLORIDA HEALTH NOTES

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### LABORATORIES

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### THE ENTENTE MOSQUITOES

Are not new varieties—just plain old ones, better understood—the blood-thirsty varieties, that, not satisfied with extracting blood, resort to poisons for the destruction of their victims; not satisfied with their dominions have gradually entrenched themselves where ever they could in all the world. And wherever they have gone, they have carried with them the “reign of terror,” have retarded progress, have literally done to death, prosperous and highly civilized nations. They held back the Panama Canal over a generation; held Cuba back a hundred years; they used to make raids as far North as Philadelphia; they reduced the proud Greeks from the heroes of Troy to the pitiable present in which they don’t know whether to play bird or beast.

But they have already seen the handwriting on the wall. Man began to understand their wiles twenty-three years ago, when it was shown how they contrive to poison their victims with malaria; and seventeen years ago, when it was shown that yellow fever was also a part of their armamentarium. And then it was that the allies declared that we “are in a state of war,” and since then has the battle waged. Year by year have we learned more and more of their methods of warfare—and year by year have we learned to combat them. Learned about their forts, their arsenals, their bases of supplies, their methods of attack, their reserves, and best of all, have learned how to rout them. Already we have driven them from Panama, and Cuba, except here and there a “piker,” have captured and destroyed all their yellow fever arsenals on the American continent, and have even followed them to their home base; have reduced their malarial strength in America to where it is hardly a tenth of what it was a few years ago, and not content with that—we are going after the beasts themselves.

New Jersey has for the last several years been making annual appropriations for mosquito destruction. Certain counties have supplemented this with considerable sums which they are increasing from year to year. Virginia has taken it up in a broad way. This over and above the fight that has been made by the towns and cities of the land for the last two decades.

Florida has as much cause to enter whole-heartedly into this mosquito warfare as any people on earth. The provocation has been as great here as anywhere, in injuries inflicted by both malaria and yellow fever. And Florida has as much reason to have faith in the ultimate outcome as any people. It used to be that every summer in addition to its death rate from malaria, was a period of dreadful uncertainty except those summers which were certainly dreadful. For twenty years now she has seen her malaria gradually decrease, and during that twenty years, she has had yellow fever only once. She will probably never have the latter again, for it is vanquished. And little by little, malaria will likewise disappear from the map. Then will the chronic malaria carrier be a thing of the past, just as the ticks among cattle will be a thing of the past—but we and our cattle will prosper, being rid of our ticks.

## “Worms and Wormy”

In Liberia, it is said, the belief prevails that one can not have good health without a tape-worm. The common form of “Good-morning” is equivalent to: “How is your tape-worm?”

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A tape-worm couldn't have sore throat—he doesn't have a throat. Doesn't swallow. He absorbs his food from the outside. And by the same token, he couldn't have tummyache.

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The other day a package of worms was sent to the State Board of Health taken from the heart of a dog. They were three to nine inches long, and formed a great tangled mass that lodged in the heart, producing death of the dog. Their Sunday name is *Filaria imitis*. The filariae, in part at least, are transmitted by mosquitoes.

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On another day a pig was received by express. Shipper wanted to know if the animal had died of cholera. His lungs were teeming with “lung-worms.” It is sometimes difficult to tell whether a pig has lung-worms or cholera.

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The hookworm has at last shown that he can beat the Ford—he has entered “society.” In the selective draft, some thousand young men were drawn, and the sorriest specimens were all rejected, down till only three hundred and forty of the best remained. These were accepted to augment our body of recruits. Then they were later examined for hookworms, and one hundred and forty-eight were found infected. Now who will deny that the hookworm is in society?

---

Humans, dogs, cats, foxes, cattle, seals—what's the use in trying—even plants have hookworms. Not so long ago one of the experts from Washington lectured down at Miami on the “Nematodes of Plants.” Very few people know what a nematode is. The speaker had difficulty in making it clear just what he meant. So he put some of them under the microscope, and let us look—nothing but hookworms! Same shape, same head, same wriggle—in fact hookworms are nematodes of man and dogs and so on. Now aren't the nematodes of plants, the hookworms of plants?

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Speaking of the hookworms of plants—if you haven't already got acquainted with them, it will pay you to send to the Bureau of Plant Pathology, Washington, and get their literature on “Ne-

matodes of Plants." You will be surprised as Kipling would say, almost out of your jumpsome skin, when you read that one of the most serious pests of the Florida farmer and fruit grower is this group of lowly worms. They are so small you have to see them with the microscope for the most part, although some of them infecting man are quite large. There is one known as the Guinea worm, which grows as much as three feet long in the tissues of the human being. When he is found under the flesh, the operation is to inject some local anesthetic so as to keep him still for awhile. Then the surgeon makes a small incision and gets hold of the worm and pulls him out a little way and ties him, (wraps him round a stick) and binds up the place and waits till next day when he can pull the worm out a little further. After many days of painful extraction, he at last gets the worm out. If he pulls too hard the worm breaks and then there is danger of the patient dying of blood poison. But back to the hookworms of plants—the nematodes. They feed upon the plant roots, girding them, and often embedding themselves in the tissues, where they look like great tumors. The nutrition of the plant is cut off, and the plant becomes stunted, like a hookworm sufferer among human—and other animals.

But don't get discouraged when you get to thinking about it. A long time ago the poet called us brother to the ox, but that wasn't because we and the ox both have hookworms, for the poet didn't know about hookworms in those days. And if he should brother us up with all our other brothers that have hookworms now, he would have to include a good deal more than the ox.

Where should hookworm treatment begin? The same like unto charity—at home. One trouble is we want the other fellow to get treated. Why not ourselves? A certain doctor was lecturing on hookworms—had written a book on the subject—when one of his pupils challenged him to be examined. He was game, and he had 'em. A certain president of a bank had 'em. Over forty per cent. of our recruits examined at Black Point had them.

And why not? The wonder is that any of us escape. When hookworms are slung round all over the landscape from "Dan to breakfast." Treatment will take care of the individual all right, but not of the community. The only way to take care of the community is to stop slinging them round—"have a place for everything, and put everything in its place."

Speaking of poets and the hookworm—one time an Atlanta poet wrote:

"Once there was a bookworm,  
Said unto his hookworm:  
"What you do, you sinner?"  
Then the naughty hookworm,  
Made answer to the bookworm:  
"I'm eatin' of my dinner."



## A GREAT AMERICAN "OFFENSIVE"

The government contemplates an immediate assault upon the insect pests that devour the crops of the country, estimating that with vigorous action at least five per cent. of the losses inflicted upon American crops by them could be prevented, probably much more. It has been estimated that the monetary value of the crops destroyed by insects in this country amounts annually to at least \$520,000,000—an estimate not based upon guess, but on keen observation extending over a number of years. Such is, in part, the tax that this country pays for allowing some two and a half million of men and boys to go forth annually and vent their rage for senseless slaughter upon the birds engaged in the beneficial work of checking the ravages of these insects—the birds which are the natural allies of the farmer. Five per cent. of this annual loss is \$26,000,000. The amount that may possibly be saved is even more than that—an addition to the wealth of the country which might aid materially in reducing the cost of living.—Editorial in Florida Times-Union.

All creatures that inhabit the earth are struggling for existence. It sometimes happens that two groups can work together to the advantage of both. Domestic turkeys and king-birds form such alliances. In biology it is called symbiosis. Dr. Yarbrough found that, on his large plantation, he could locate his turkeys by noting where the king-birds were perched. The turkeys scare up grasshoppers, which the king-birds catch upon the wing. The birds in turn keep the hawks away from the turkeys.

Man and the birds have formed such alliances. Among man's most inveterate enemies are certain insects, that prey on his field crops, his fruit, his vegetables. Not satisfied there, they spread disease among his cattle, nor do they spare himself. Malaria, typhoid, yellow fever, surra among horses, trypanosomiasis among cattle, and many other diseases are transmitted by insects.

The insects are man's enemies in this struggle for existence, this war of extermination, while the birds are his allies. Hundreds of species have valiantly lined up by his side, while he in turn ruthlessly destroys them. To kill our allies, the birds, is like killing our allies, the French, or British soldiers.

Let me cite a homely instance. On a large farm in South Georgia, it used to be the task of a small boy to "mind" the meadow larks out of the corn. For about three weeks when the young corn was just sprouting, the larks played havoc with it. The boy had a little muzzle-loader, with which he chased them all across Poland and back again, shooting every time he came in range, but the birds soon learned his range as well as he knew it, and he seldom hurt one.

At length he said to his father: "Let's bait them in the winter, when food is scarce, and we can trap them," and the larks were baited and trapped. Hundreds were destroyed in this way, but the bird nuisance was not abated for the birds came for miles to the "bread line." Then said his father: "Let's cease to trap them, and cease to shoot them, and let's supply them with food while the corn is sprouting." And the larks left the corn-fields and feasted on food supplied, and increased in numbers, and made the air resonant with song. And the father and the son learned a lesson. Now said they, that the birds no longer trouble the corn, we can devote our time to the cut-worms that are destroying the young

cotton. And they turned to the cotton, but behold! The larks were there ahead of them, and taking the cotton row by row, plant by plant, were searching for cut-worms with which to feed their young, for young larks cannot eat grain.

Then the father said: "We will put up signs forbidding shooting, that this farm may henceforth be a bird sanctuary. They shall be fed in winter and protected in summer, and the migrants shall be welcome, when they return in spring and in fall."

And for many years the sound of gun has scarce been heard on the old plantation, and the larks still guard the tender crops, and the spring migrants pause to rear their broods—the bunting and tanager nest in the thicket hard by, and the mocking-bird in the rose bush, and the ground dove in the yard, and the house wrens in the smokehouse, and all the spring and summer are made glad with song, for two old people who have loved and cherished them and who live there all alone now—waiting for the fall migration.

## NORTH CAROLINA COUNTY PLAN IS TO BE STUDIED BY CHINESE PHYSICIAN

### Dr. Yen Will Investigate Fight Being Waged on Soil Pollution

Drastic measures adopted by the Nash County (N. C.) Board of Health to secure better home sanitation has attracted attention from Dr. Yen, noted Chinese physician and Medical Director of Mines of that country, who is on his way to that locality to study the prevention of soil pollution, particularly hookworm disease.

Dr. Yen was directed to Nash County by the International Health Board, which has taken a particular interest in the campaign.

Nash is the first county in that State to make such a sweeping law in regard to home sanitation. The ordinance says: "Every house used as a dwelling in Nash County, shall have on the premises a sewage closet or properly constructed sanitary privy." It was the first county to make and enforce a law requiring every school house in the county for both races to be provided with sanitary privies. The ordinance requiring the vaccination of school children before entering school is another health law that Nash was the first not only to make but to enforce. The effect of these laws has been to advance health and sanitation and to promote general prosperity.—North Carolina State Board of Health, Press Service.

## TYPHOID AND THE CAMP

Don't know who, or who else, claims the honor of having pulled it off, but at any rate Jacksonville has a camp.

When the State Board of Health published the fact that Florida has a death rate of 25 per hundred thousand from typhoid fever, some people said: "Sh— it'll scare 'em away!"

But it didn't.

They probably never heard of it. And if they did, and if they considered it at all, they likely reasoned about thus:

"Twenty-five per hundred thousand from typhoid?"

"Pretty high death rate."

"Besides typhoid is controllable."

"Looks like they are going after it."

"Guess Jacksonville 'll do."

"SAY JACKSONVILLE."

## HEALTH PROBLEMS WILL BE DISCUSSED AT CONFERENCE AT WASHINGTON, OCTOBER 17, 1920

### Will Replace Annual Meeting of American Public Health Association in December

To the end that there may be co-operation and co-ordination of effort among public health officials and physicians throughout the entire country a "war meeting" will be held at Washington, D. C., October 17-20, by the American Public Health Association. This meeting will replace the annual meeting of the association which was to have been held at New Orleans, December 24, 1917. The papers and conferences at Washington will deal largely with the public health problems created by the war—the food supply, communicable diseases among soldiers, war and venereal disease, war and the health of the civil population.

President Wilson has said: "It is not an army we must shape and train for war; it is a nation." It is expected that the conference will be attended by men prominent in health work from every section of the country. It is likely that the experience of this country will resemble that of Canada, rather than of the nations across the Atlantic. After the war had been in progress for a short time Canada found that it was facing serious health problems, which affected almost every community. This country has not yet begun to feel the real effects of the war. When it does the co-operation of every community will be required to meet the health problems which will arise.

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## HOOKWORM AMONG THE FLORIDA TROOPS

### Counties Should Eradicate Disease As Patriotic Measure

The necessity for hookworm eradication in Florida is emphasized by the fact that out of feces from three hundred and fifty Florida National Guardsmen at Black Point examined by the State Board of Health Laboratory forty-three per cent. of them indicated presence of this disease.

All of the feces examined were taken from members of the State troops representing the pick of the young men of Florida. This gives a fair indication of the prevalence of hookworm disease in the State and shows that each county unit should take up the work of eradication both as a health measure and a patriotic duty in time of war.

## TEACHING HEALTH IN THE PUBLIC SCHOOLS

Miss Nellie C. Stevens, Principal of Primary School, Ocala, Florida

[In Ocala they have a primary school. This school embraces the first three grades, and they have a teaching force of some seven or eight. Miss Nellie Stevens is the principal. Miss Stevens has been doing some pioneer work of a high order. She is actually teaching public health in the public schools, and is making it go. And what is more she is doing it, it will be noted, in the primary grades. She has kindly prepared for Health Notes, the following suggestion.—Ed]:

One of the problems confronting the teachers who includes health lessons in the course of study, is the means of applying the truths learned in the lives of the pupils.

To attempt to teach health facts without providing an opportunity to use them is useless, for no truths that do not become a part of the child's experience are really his own. Furthermore the privilege of knowing brings the responsibility of doing, and conscience is perverted when the application is omitted. It is education in doing rather than in knowing that we need, and plans for the use of health lessons must be made by the teacher. The following brief outline indicates a plan that has been successfully used in our schools:

The teacher talks with the pupils of the city or town government, of the different departments—electric lights, water, fire, etc., and of the committees appointed to look after these departments. She also tells the pupils of the important work done by the City Board of Health, their duties and responsibilities. The names of the Board of Health may be given, and the city health laws may be discussed. The suggestion is then made that the pupils of the grade, or school, organize themselves into a board of health which will look after the sanitary conditions of the school, observe the conditions existing in the community, and co-operate with the regular Board of Health in correcting insanitary conditions, insofar as it is able. The organization may be more or less elaborate, according to conditions. It will be necessary to have a president and a secretary. There should be three committees appointed by the president that will make written reports at each meeting. These committees should look after and report on the condition of yards and out buildings—the care of the home, and give the record on personal hygiene for the grade that has been made from the daily inspection of the teachers. These reports should be read at the meeting of the board of health by the chairman of each committee and handed to the secretary who will deliver them to the principal of the school, the medical inspector or some one who will be interested, and who will indicate this interest by occasionally referring to the reports. In addition to these committees there should be a committee from each ward or neighborhood that will report orally on the sanitary conditions—reporting garbage disposal, the breeding of flies and mosquitoes—the steps necessary to correct insanitary conditions, and



any matters of interest in regard to sanitation. These reports should be freely discussed and any other reports of interest to the board of health listened to, the teacher watching the discussion and correcting at the time, or in later health lessons, any incorrect statements.

Topics that have been presented in health lessons may be taken up and discussed, the teachers planning with the pupils his line of thought. Papers may be written and read, newspaper and magazine articles read and talked over, posters planned, made and presented to the board for its exhibit in health work—slogans suggested and adopted, or demonstration lessons given.

In the intermediate and grammar grades the location of the town may be discussed, the elevation, drainage, sewerage system and water supply may be studied. Pupils may map out the city and show breeding places for mosquitoes, and take some steps toward aiding in abolishing these nuisances.

The work of the City Health Officer will be an interesting topic of study. The score card used in rating dairies, meat markets and bakeries may be explained by the teacher, and committees may visit these places and report on the sanitary conditions.

The pupils should know the rating indicated by the City Health Officer, and impressed with the importance of patronizing clean shops. In the high schools the causes of diseases might be entered into quite extensively—statistics compiled and compared to those of other communities, a sanitary survey might be undertaken that would be of real help to the City Board of Health, and laboratory work carried on that would have educational value, and that would appeal to the pupils because of its immediate application.

The teacher who undertakes this work will find many interesting avenues opening before her, which she may suggest to the pupils. Her aim should be to establish good habits in personal hygiene by arousing in the class a desire to reach certain standards to lead the pupils to observe sanitary conditions, and through the study of sanitation find how unwholesome conditions may be improved, and most important to cultivate a feeling of responsibility for existing conditions in the school, the home and the community and a willingness to co-operate in public health work.



## Press Service

### MAKES APPEAL TO CIVIC PRIDE OF FLORIDA PEOPLE

State Board of Health to publish list of cities where sanitary regulations are enforced.

A plan to appeal to the civic pride of Florida people has been referred to mayors of the various municipalities by the State Board of Health. It calls for wholesale removal of those conditions that cause the annual high death rate from intestinal diseases by enforcement of approved ordinances and regulations.

Every municipal executive in the State has been addressed by Dr. Hiram Byrd, Scientific Secretary of the State Board of Health, asking his co-operation and that of his people in the movement. Towns coming up to the sanitary requirements will be listed by the State Board of Health in order that the responsibility may be placed on those cities that do not co-operate in the campaign.

"The death rate from intestinal diseases in Florida is entirely too high," says Dr. Byrd's communication. "To be more specific: in the registration area of the United States, there are eighty-seven deaths per one hundred thousand population from intestinal diseases every year; in the registration area of Florida, there are one hundred and seventy-five deaths per hundred thousand people annually.

"The State Board of Health has set itself to the task of correcting this. It cannot do this without the co-operation of the people. We believe they will gladly co-operate with us when they know the true conditions. But—and here comes the tug of war—some towns object to our telling this. They say it will injure Florida."

"We have accordingly decided to list the towns that come up to certain sanitary requirements, so that the burden of responsibility for this high death rate may rest where it belongs. That list will read as follows:

"The following towns and cities in Florida are enforcing such regulations for the prevention of intestinal diseases as are recommended by the State Board of Health. If your town does not appear in this list, it is because it is not living up to the standard of requirements. See the mayor and let him explain why."

"Then will follow the list of towns. Now the requirements are as follows:

"1—If there is a sewer system, all residences shall be connected up with it as far as possible, sanitary privies shall be installed. The L. R. S. type is preferable but any privy will be accepted as sanitary that is fly-proof and odorless, and that it cleaned regularly, by some one whose business it is to clean the privies. It cannot be left to the owner.

"Food-stuffs exposed for sale must be effectively screened against flies.

"There must be a health officer, and in towns of 15,000 or more, he must be a whole-time health officer. Please let us know by return mail if you will co-operate with us in this campaign for better health, and whenever your town qualifies for a place on the list, let us know and a representative of the State Board of Health will check it up and list it accordingly. Remember this list will be published and distributed among the health authorities throughout the United States, Canada, Mexico and Cuba. The State Board of Health has no intention of injuring any community by exposing conditions negative to good health and a low death rate. It believes that, by a campaign of the most wide-spread publicity, more favorable results can be accomplished than by yielding to the belief of some that suppression of facts will enhance business and property values. The State Board of Health is as strong a believer in community building and commercial and industrial progress in Florida as any organization. The future possibilities of the State are unlimited, but against this now stands a death rate from preventable diseases which can and must be reduced. When this is done, more people will come into Florida to find homes and prosperity will be a natural consequence.—Released August 5, 1917.

## SANITATION A REAL PATRIOTIC DUTY OF THE FLORIDA PEOPLE

Comparison of rules and regulations put into force by the medical department of the Army to conserve the health of soldiers sent to camp to train for the war with advice given the civilian population by public health authorities for many years are interesting. In many respects they are almost identical.

The need to conserve the health of men in the army is placed foremost by the government; and the practice of health regulations in the service should prove an incentive to the civilian people to pay the closest attention to their enforcement in every-day life.

Greater than in ordinary times is the demand for healthy men and women to shoulder the burdens brought upon the American people by the war. Not only those who go into the army to fight for their country must be physically fit, but those who remain at home must protect their health that the men lost in the battle be replaced by a strong, sturdy new generation and to better fit them to carry on the present work necessary to maintenance of the home establishment.

Florida's greatest need in public health work is reduction of the enormous death rate from intestinal diseases and the improvement of her manhood by eradication of such diseases which arise from unsanitary conditions. Sanitation is the great need of the hour; and it is to the accomplishment of this need that the State Board of Health has set itself.

The cry at home is "business as usual," but to maintain business at its usual standard makes necessary a healthy people to conduct it. Unsanitary conditions, which are entirely preventable by proper regard for accepted rules, probably more than any other cause bring about inefficiency to perform ordinary labors. Is it not apparent that this inefficiency is enhanced when extraordinary work is created by the war?

Through its intensive sanitary campaign, which was inaugurated several weeks ago, the State Board of Health is endeavoring to accomplish a most important and magnitudinous task. It is seeking to show the public the harm that comes from improper sewerage disposal, unsanitary privies, flies, and the good result of co-operation with this body in making Florida a clean, healthy State. The annual death rate from intestinal diseases, typhoid fever and similar causes, if reduced, would not only conserve human life and save millions of dollars for the families of those stricken, but it would mean the enhancement of property values and the attraction of new people here to find homes. Hence, co-operation with the State Board of Health in this work makes its appeal to all classes of people.—Released August 22, 1917.

### FLORIDA COUNTIES CAN TAKE UP ERADICATION OF HOOKWORM IN THEIR BORDERS

Which Florida county will be the first to move for hookworm eradication within its borders? This is a question the State Board of Health is asking in its campaign to bring about reduction in the prevalence of this disease in Florida and one which should greatly concern citizens residing in intensely infected areas. Although Florida was the pioneer State in attempts to remove the hookworm menace from its people, she is now far behind other States in continuation of the work which is accepted by the best authorities as the most effective means of eradication. The Rockefeller Foundation spent five years and about \$1,000,000 finding out that holding of clinics and treatment of a part of the hookworm sufferers in a community and leaving a hookworm environment would not remove the disease.

At the present time the Foundation works under what is known as the intensive unit system. By this plan a county, which is usually the accepted unit, signifies its willingness to commence a rigorous campaign against the hookworm. It makes an appropriation and both the State and the Rockefeller people meet this with equal amounts, thus creating a fund three times the sum of the county's contribution.

In this way each unit is cleaned of the hookworm disease and the future reassured against re-infection more effectively than through any other system that has been discovered. When the Rockefeller Foundation first commenced its study of hookworm eradication, Florida's State Board of Health already was operating

clinics. The people in infected areas would be gathered together in groups at school houses, in churches and rural villages for examination and treatment by the Board's physicians.

By this plan only a part of the infected people would be cured, thus leaving a large percentage of infection which would cause a redistribution of the disease and undo the work of eradication as fast as it was accomplished. Realization of the lack of feasibility of this plan was the cause of its abandonment for the intrinsic unit system later.

The beauty of this clean-up system is that it not only clears the hookworm deck but likewise typhoid, dysentery, diarrhoea—in fact all the intestinal diseases, which is responsible for a large majority of all our preventable deaths in this State.

When the Rockefeller Sanitary Commission was formed, one of the first things done by Wickliffe Rose, who was placed in charge of the work as chief administrative officer, was to come to Florida and examine conditions. When he appointed Dr. A. G. Fort to assume charge of the work in Georgia, he ordered him to proceed to Florida and begin a study of the plan then in use here. Later Dr. John A. Ferrell, now assistant director general of the International Health Board, also came and made a careful survey of Florida's plan. Thus the work then conducted by the State Board of Health, while dismissed now as ineffectual, was the basis of present day treatment and eradication work.

As far as the individual is concerned, the hookworm will disappear of its own accord in two or three years, even if treatment is not had. The worm does not propagate within the human system, it being necessary for its larvae, which is thrown off through the bowels, to develop outside before re-entering the human system. When this development of the larvae is ended and favorable conditions for its propagation removed by intensive sanitary observances and the worm removed by treatment of the individual, Florida will have accomplished her work of eradication.

At this time there is not a single intensive unit being operated in the State. The work is in progress in the States of Alabama, Mississippi, Louisiana, Texas and North and South Carolina. The means of establishing a clean-up crusade in Florida is available. Which Florida county will be the first to take the work up?—Released August 28, 1917.



## STATE BOARD OF HEALTH TO HELP THE MUNICIPALITIES

The State Board of Health is impressing the fact upon municipalities throughout Florida that it stands willing to act as a foster-parent to them in their activities to improve public health conditions.

It is not the function of the Board to perform all of this work for the municipalities, but to assist and advise them wherever necessary for conducting the most efficient efforts.

At the present time, Jacksonville is the only municipality that has a whole time health officer, although other cities are performing remarkably effective work with co-operation of the State body and the work of their part time local health officers.

For instance, Miami is working with the State authorities by paying rent for the State Laboratory building there as well as standing for part of the salary of a laboratory assistant to do municipal milk work. As a result of this assistance on the part of the municipality, the work there is increasing in effectiveness and the city of Miami is enabled to derive greater benefits therefrom.

While most of the municipalities can secure locally the services of a whole or part time health officer, the State Board of Health can best co-operate and guide their activities by performing laboratory work and sanitary engineering and statistical labors for them. These features are necessary to the successful conduct of a good health administration. Through a co-operative effort each municipality can be of service to the Board and receive equal service in its work from the larger body.

The State Board of Health is seeking not only to prevent the spread of diseases by educational work among the people, but by a concerted effort throughout the State to lower the death rate from intestinal and preventable diseases. To do this conditions conducive to the spread and development of disease must be removed and kept from existing again. This can only be accomplished through a co-operative system of work on the part of the various communities and the Board.—Released September 12, 1917.



## Bureau of Vital Statistics

F. L. WATKINS, M. D. *Statistician*

### FATHER AND MOTHER is the BIRTH OF YOUR CHILD REGISTERED?

Never before has there been the demand for certified copies of records of births as that experienced during the past few months, occasioned by the present war. Many parents have requested copies of these records for the purpose of presenting them to exemption boards in order that their sons might be relieved from military service on account of not having reached the military age as fixed by law. It is to be regretted that in many instances it has been impossible to locate the desired records, due to the fact that little attention was given to the registration of births during the years when records should have been filed that are needed at this time.

There are many who desire to serve their country in capacities other than soldiers, but in order to be allowed to go abroad it is necessary for them to present proof of their birth to the Department of State before passports will be issued. Many of these have not been able to establish the place and date of their birth from the records of the State Board of Health.

From past experiences we know that certified copies will be required for many of the boys and girls born during the calendar year. There is no reason why all births that occur in the State of Florida should not be registered, as the Vital Statistics Law requiring the registration of all births was put into operation January 1, 1917. This law provides for the permanent preservation of the original records and any information desired at any future time should be available.

We know that hundreds and probably thousands of births have occurred during the present year in the State of Florida that have not been registered as required by law. Do you know, that to have a child admitted to the common schools in some States it is necessary to present proof of the date of its birth? Might it not be possible that you, like many others, have left the State of Florida without having the birth of your child registered and find it impossible to have it admitted to school until after considerable delay?

The law provides that each municipality shall constitute a primary registration district and gives the State Registrar authority to create as many districts as may be necessary outside of incorporated places. In arranging the 776 registration districts in the State of Florida, a map of each county showing township and range lines, together with all other obtainable information, was used in establishing these districts, and each district was estab-

lished for the sole purpose of making it as convenient as possible for the greatest number of those on whom the law placed the responsibility of reporting births and deaths. It is realized that some of the districts are large, but owing to the fact that it was necessary to have well defined boundary lines for each district, the voting precinct was adopted as the rural unit of registration. In each registration district, except a few, a Local Registrar has been appointed, whose duty it is to accept birth and death certificates filed with him for births and deaths that occur in his district. Local Registrars receive a small fee for this work, which is not sufficient to warrant their traveling over their district to secure birth and death certificates, and it is not the intent of the law, or those operating it, to expect them to do this, as the law provides that the physician, midwife or parent, as the case may be, is responsible for reporting the birth within ten days after date of birth with the Local Registrar of the district in which the birth occurred. The person having charge of the burial of a body must file a death certificate with the Local Registrar of the district in which the death occurred and procure a burial permit before making any disposition of a dead body by burial or otherwise.

Each month many of the Local Registrars report that one or more births have occurred in this district and that a certificate of birth has not been filed with them, as required by law. Each birth that is not promptly reported to the Local Registrar necessitates a great amount of correspondence, which requires additional clerks and postage, and much of this could be eliminated if the taxpayer would give full co-operation and see to it that when a birth occurs in his family it is reported to the proper authority without delay. Every cent that can be saved in the operation of the law requiring the registration of births and deaths can be applied to other phases of Public Health work.

It is from the records of births and deaths that studies are to be made which will enable the State Board of Health to work in an intelligent manner in its fight against unnecessary deaths. Without complete registration of births it is impossible to have any definite knowledge of infant mortality, and how can deaths of infants, many of which are preventable, be prevented without knowing the facts that are necessary for this purpose? From the death records it is possible to ascertain the diseases that are causing deaths that otherwise might be prevented.

The births and deaths in the State of Florida must be registered not only because the law requires it, but because the records may at some future time be of inestimable value to a family or to some individual. And, complete registration of these events are indispensable to health officials in the prevention of unnecessary sickness and deaths.

Practically all of the births are registered by one of two persons; that is, the physician or midwife. About forty per cent. of them by the former and about sixty per cent. by the latter. Since

the greater per cent. of the births are reported by the midwife, it can be readily understood that many of these records are very incomplete in giving the information that is required, as many of the midwives cannot read or write and are dependent on others for filling out the blanks. Those that can write, often write in a very illegible hand, making it impossible in many instances to decipher even the name of the father or mother of the child. The parent should always bear this in mind and not entrust such an important matter to any person unless they know that the record will be made in such shape that it will serve the purpose for which it is intended. Regardless of the person on whom you are depending to report the birth of the child, you should not be satisfied until you are sure that the birth has been reported. No man would purchase a piece of real estate and not have the deed recorded, regardless of its value, yet some of these same men are having children born in their family and have not taken the trouble to see that the birth of the child is registered. The registration of the birth of a child is just as important as the recording of a deed. The child will most certainly not be able to inherit property, even if the deed is recorded, should any question arise which would seem to throw any doubt on the birth of the child. The parents have not fulfilled their obligation to their child until they know positively that its birth has been recorded.

There being no provision made by law for the licensing of midwives makes it possible for numbers of these women to take upon themselves the responsibility for bringing into the world thousands of children each year in our State. These women are law-abiding citizens and are willing to do all that the law requires of them. They will report births attended by them when they fully understand what is expected of them. Yet, the parent must assume some of the responsibility and know that the birth has been properly reported.

The physician being an educated man can fully appreciate the necessity of having a record made of all births. Taken as a whole, the physicians are giving full co-operation in the matter of reporting births. It is only occasionally that one is found who does not fully respect the laws of his State and apparently cares less for the future welfare of those upon whom he is dependent for his livelihood. It is a difficult matter, if not impossible, to get the viewpoint of one that would refuse (neglect can often be overlooked under certain circumstances) to report the birth of a child attended by him. It simply means that one that assumes such an attitude is taking advantage of a helpless infant that is incapable of looking after its own interests.

## IT CAN BE DONE

No institution has a right to exist unless it serves some definite purpose. The State Board of Health of Florida, or any other State, has no reason for its existence unless it is able to prevent unnecessary sickness and deaths.

If you were to ask at this time whether the Florida State Board of Health was accomplishing the purpose for which it was established, it is doubtful whether conclusive proof could be furnished. As has been previously stated, it is the duty of the State Board of Health to lower the death rate. Some few localities might be selected in which a reduction in the death rate might be shown, but taking the State as a whole, there is not, at the present time, any data available giving conclusive information.

Realizing the necessity for keeping in close touch with the diseases which are preventable, the State Board of Health, at its annual meeting, February 13, 1917, adopted rules and regulations governing morbidity reports. These rules require that every person who treats or examines for the purpose of diagnosis or treatment any person suffering from, or suspected to be suffering from, any one of the thirty-six diseases named, shall report that fact to the State Board of Health on forms provided for that purpose.

The State Board of Health, upon receipt of these reports, can keep in touch with the health situation of every community in the State of Florida, and by giving prompt attention to certain communicable diseases prevent their spread. The prevention of other cases will naturally reduce the number of deaths from this cause. The rules governing the reporting of these diseases will be put into effect on November 1, 1917.

With the information that is available at the present time; that is, the statistics of deaths which have been taken from the 106 municipalities which reported deaths for the years 1916 and 1915, would indicate that in the prevention of sickness and saving of life the most could be accomplished by the Board in directing its attention to intestinal infections (typhoid fever, dysenteries, and diarrhoea and enteritis).

The records from the Florida municipalities referred to show the death rate from intestinal infections to be twice that for the same causes in the Registration Area of the United States, and that deaths from intestinal infections in the State of Florida exceed the number of deaths caused by tuberculosis. *The State Board of Health has wisely decided that its policy will be to give more attention to its fight against intestinal infection than any other particular cause or causes.* It is the intention of the Board, upon receipt of a report of typhoid fever, or dysentery (either amoebic or bacillary) to daily bring these cases to the attention of the District Health Officer from whose district the report is received. An effort will be made to have the District Health Officer visit each case of typhoid fever or dysentery reported from his district. By doing this, many other cases can be prevented. The



District Health Officer can prevent the occurrence of other cases by advising the people residing in the community in which a case of either disease exists to adopt certain sanitary measures, and that in case of typhoid fever, the people in a community can be vaccinated against typhoid fever. Through vaccination, and the adoption of sanitary measures, typhoid fever, within a few years, can be greatly reduced. Typhoid vaccine will, in the near future, be made by the State Board of Health in its Central Laboratory. It is now furnished free of charge to any physician making application therefor.

One of the sanitary measures that it will be necessary for every community to adopt in its fight against typhoid fever and dysentery will be the prevention of soil pollution. That means putting in flyless and odorless (the word "odorless" is here from habit) privies and keeping them so, and then not treating them as ornaments. When this is done for the purpose of preventing typhoid fever and dysentery, it will at the same time prevent hookworm infection. Do not forget that—it is important. It has been conclusively shown by those who have directed their attention principally to hookworm disease that the treatment of those suffering from hookworm does not solve the problem, but that they become re-infected by again coming in contact with polluted soil.

It is believed that the State Board of Health will receive the hearty co-operation of the people of Florida in its effort to secure information concerning communicable diseases. A community may suffer greatly from typhoid fever, or any other communicable disease, and if the State Board of Health does not have knowledge of the conditions existing in that community, it would be impossible for them to render any assistance.

Every person having knowledge of the existence of a communicable disease in their community should not have any hesitancy in notifying the State Board of Health of that fact in order that it may receive proper attention.

NO HEALTH DEPARTMENT, STATE OR LOCAL, CAN EFFECTIVELY PREVENT OR CONTROL DISEASE WITHOUT KNOWLEDGE OF WHEN, WHERE AND UNDER WHAT CONDITIONS CASES ARE OCCURRING.—U. S. Public Health Report.



## IMPORTANCE AND VALIDITY OF VITAL STATISTICS LAW

(State vs. Norvell, et al. (Tenn.), 191 S. W. R. 536)

The Supreme Court of Tennessee holds valid the vital statistics law of that State, Chapter 30 of the Acts of 1913. The court says there can be no question but that this statute will tend to promote the safety, health and well-being of the community. The State of Tennessee maintains a board of health at considerable expense, created for the purpose of fighting and endeavoring to control the diseases to which the inhabitants of the State are subject. Perhaps the most important duty of the State Board of Health is to take steps, in co-operation with local health officers, for the prevention of disease. This work cannot be intelligently or effectively prosecuted without the information which the statute in question is designed to afford. The various local registrars are required to file the certificates procured by the undertakers with the Board of Health. From these data the Board of Health can determine the needs of each particular community in the State, and may employ the necessary measures accordingly. These reports will show where tuberculosis prevails, where typhoid predominates, where there is malaria, and, generally speaking, will indicate the hygienic wants of each section of the State. The Board of Health will thus be able to take the precautions and administer the relief most needed by every community. Such a system is just as necessary to a successful campaign by the Board of Health as is information concerning the enemy's movements to the general in command of an army. There can be no specialized or well-directed effort by the Board of Health without such knowledge. Looking to another aspect of the material welfare of the State, no considerable immigration from one State to another now occurs until those coming in have made inquiries as to the health and death rate of the particular locality to which they intend to move. With the information forthcoming from the operation of the vital statistics law, the Board of Health will be in a position at all times to reply to such inquiries from those desiring to move into Tennessee. The provisions of the statute with reference to the registration of births, which were not drawn in question on this appeal, will obviously be most useful. A permanent record of births and parentage of all persons born in the State will be of great service in the administration of estates and in fixing the devolution of property. Such matters are often questions of doubt in important litigation. The statute makes certified copies of these records prima facie evidence. The records of births likewise will prove of much value in the enforcement of the laws against child labor. They will make fraud and deception on the part of parents and employers impossible. The court might mention other beneficent offices of the statute, but sufficient has been said to demonstrate that the act is a wholesome exercise of the police power of the State. Such being the view of the act, it is obvious that the constitutional objections

urged against it were not well made, wherefore the court reverses a judgment quashing an indictment of *the defendants, who were undertakers who were charged with handling and removing a dead body without a permit for its removal*, the motion to quash having been sustained on the ground that the vital statistics law was unconstitutional. It is conceivable, of course, that the attending physician or local registrar or others may prove obstreperous or unmindful of the obligations imposed by the statute; but, in such an event, the undertaker may safely proceed with the disposition of the body. If he is diligent himself to comply with the law, the court will not punish him for the default of others. The duties placed on him by the statute will put him to some trouble. Organized society is entitled to demand such services of any citizen, however, for the health and safety of all, just as for the same reasons, the property of any citizen may be destroyed, without compensation.—*Journal of the American Medical Association, August 18, 1917.*

## Bureau of Diagnostic Laboratories

B. L. ARMS, M. D., *Chief*

### THE LABORATORIES

The laboratories of the State Board of Health were founded to assist in preserving the health of the citizens of the State and in case of illness to aid in the diagnosis. The scope of the work is the examination of material from patients suffering or suspected to be suffering, from any condition of a bacterial or parasitic nature dangerous to the public health.

It is our ambition not only to maintain the high standards of efficiency of the past, but also to make the laboratory division of even greater value to the people. We desire to co-operate with every physician of the State and render every assistance possible to the end that we make this a State known everywhere for the co-ordination of all the forces to better the health of the people. "Health is the foundation of happiness," is just as true today as ever and it is our opinion that it is more appreciated now than it has been before.

As we trust this will be read by many other than physicians there is one point that should be understood and that is that specimens, unless they be for intestinal parasites, should be sent through a physician or at least the name of the physician to whom the report should be made, must be given. Lest some fail to understand why reports will only be sent to physicians it is but necessary first, that the laboratory test is but one part of the examination of the patient and cannot take the place of the physical examination; second, that in the interpretation of the reports it needs the correlation of all factors and not the result of any one test.

As an illustration of this let us consider the question of tuberculosis. The laboratory cannot render a positive diagnosis until the breaking down of tissue, with the discharge of the tubercular organisms into one of the passages that will permit their expulsion in the sputum and by this time the patient has passed the point where the greatest good can be accomplished, as the case is more advanced, thus valuable time is lost and longer treatment is necessary in order to affect a cure.

## Bureau of Sanitary Engineering

GEORGE W. SIMONS, JR., *Chief*

### THE FLY PROOF TOWN

It is said that the "Weary Willie of the railroad tie," otherwise known as the tramp, belongs to some sort of a secret association—an organization which has a collection of symbols and signs known only to the tramp. When one of the brotherhood, in his wanderings from place to place, finds a good town where the people are generous with the "handouts" he sends forth the good news and it isn't long before all the members in the vicinity know of the good strike. Not only that, but the system is even carried to such a refined extent that certain good houses are graded and given a mark which may be in plain sight to every one but is known only to the brotherhood. Soon the tramps become a nuisance and are the topic of daily conversation at the village store or club—until the constable gets on their trail and rids the town of them and makes it a tramp-proof town. Now apply the same story to the fly.

In the ordinary community where screens are more of a curiosity than anything else we have the same good people. Their food is tasty and plentiful—they invite Mr. Fly in to three good meals a day—but the fly, like the tramp, is never satisfied. After being well treated in the house the fly returns to the privy to still further feed until his day's work is well done. The privy is the fly's club until the next meal is ready in the kitchen or dining room. Whether the flies are able to communicate with each other or not, we will not argue this point, but nevertheless they are not in gathering a crowd at any time—the word is easily passed around the board. But soon the fly, like the "Weary Willie," becomes a nuisance and even the most careless people sometimes have to make attempts at screening in order to enjoy personal comforts and get enough food to eat for themselves. By degrees all people are gradually realizing that the fly is dangerous and steps are being taken all over the State of Florida to combat him.

On the statute books of the State appears a law requiring that all privies located in incorporated towns or cities shall be maintained in a fly-proof condition at all times. The present administration is rapidly seeing that this law is being effected and strenuous campaigns are being executed in all districts by the District Health Officers to accomplish the one sole end—GET YOUR PRIVIES FLY-PROOFED AND SEE YOUR DEATH RATE FALL.

Recently while making an inspection tour down the east coast, the writer chanced to visit a 100 per cent. fly-proofed town. Think of that—the little town of Delray, in Palm Beach County. Delray is a small place, probably one would go through it on an East



Coast limited and never notice it—but the good people there are on the alert and are doing things worth while—100 per cent. fly-proof.

After the city council passed the privy and food screening ordinance the flies begin to leave town in disgust—they realized that the citizens of that town meant business when they put themselves on record. During the past winter Mr. Fly and his brigade just about carried the town away and all the people of Delray had declared war. As soon as the ordinance had been enacted the crusade was started for the fly-proof privy—right off the bat—hundreds of Stevens cans were ordered; citizens who had property in the colored areas got busy and erected well designed and perfectly fly-proof pit privies. The work was done fast and nothing was left uncovered. Thirty days was the maximum allowance of time for completing the work and getting places into shape. At the end of that time the city marshal made a trip around the town with a pack of large cards under his arm; if he came to a privy that had been ignored or neglected he nailed the door shut and tacked one of the large white cards on the outside in such a manner that if the owner attempted to open the privy the card would tear. That card read: "CLOSED BECAUSE OF FAILURE OF OWNER TO COMPLY WITH CITY ORDINANCE, ETC." That marshal meant business, and as a direct result of his aggressive, energetic, untiring endeavors, Delray can now boast of being one of the best privied towns in the State of Florida.

Privies were not the only places fly-proofed. All display cases, baskets, cabinets or racks wherein raw foods to be eaten uncooked were kept—these were screened also. Bunches of bananas, baskets of cabbage, berries, radishes, etc., were all protected from the fly by means of substantial wire screens. And a step further—no foods were allowed to lie about on the floor exposed to dogs—elevated stands or racks were provided.

The above shows conclusively what a town can do to combat the dirty fly—what is your town doing? Get in line and let us have more 100 per cent. towns.

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### GARBAGE FEEDING TO HOGS

In the last issue of "Health Notes" the writer caused to appear a brief, but timely, article on Garbage Feeding to Hogs. Since the appearance of this article several important papers have appeared in various journals relative to this method of consuming waste food matter by hogs. Consequently it was thought advisable to write more in detail along similar lines.

In July, 1917, the Extension Division of the Georgia State College of Agriculture issued an excellent bulletin entitled "Feeding Garbage to Hogs," written by Mr. James E. Downing. In this paper Mr. Downing makes plain, simple statements relative to garbage feeding to hogs, especially in connection with military camps where it has been practiced (Macon, 1916). He impresses



upon one the cares which must be exercised in order to get the results, (1) the necessity for having fresh garbage daily; (2) the boiling and subsequent cooling of garbage to prevent souring; (3) the necessity for clean feeding troughs daily; (4) the cheap wooden trough versus the concrete feeding floor; (5) the quantity of material to feed; (6) and the types of retaining cans advisable. The paper is very comprehensive and instructive.

In the Engineering and Contracting Magazine for September 12th, 1917, appeared an article on garbage disposal, representing a quantity of cost data recently collected by the Springfield (Mass.) Bureau of Municipal Research. This article exhibits the following significant data: "Thirty-four out of 112 cities were feeding garbage to hogs in 1915." Many cities not only dispose of their garbage at no cost by the use of this method but also make it the source of a large amount of revenue. The following receipts are reported for the cities named:

Grand Rapids, Mich.....	45 cts. per ton.	\$ 4,450
St. Paul, Minn.....	80 cts. per ton.	.....
Cambridge, Mass. ....	70 cts. per ton.	17,382
Laurence, Mass. ....	1.25 cts. per ton.	8,865

"Denver, with a population of 265,000, has its 21,600 tons of garbage collected as well as disposed of by hog growers' association, and Colorado Springs has its garbage collected and disposed of by hog growers, and receives in addition to \$1,440. Assuming that the cost of collection in these cities was \$0.30 per capita, which was two-thirds the per capita cost of collection reported in 1915 by fifty-nine cities, the city of Denver saved \$64,000 in 1916, and Colorado Springs saved \$9,600 plus the \$1,440 actually received."

"From December 1, 1916, to May 31, 1917, the city of Worcester, Mass., has disposed of its garbage at an approximate cost of \$7,500, and has received over \$21,000."

At Worcester, available cost data tends to show that, "an investment of \$5,485 per daily ton would be required to establish a plant capable of disposing of a daily production of twenty tons."

Mr. Samuel A. Greeley, a Chicago sanitary engineer, has estimated that, "to dispose of an average of twenty tons per day, or 7,300 tons per year, the cost per ton of garbage would be \$1.98."

The above information is given for those who may be further interested in the problem.

Recently the Bureau of Engineering received a very interesting and important letter from Prof. C. L. Willoughby, Professor of Animal Husbandry, University of Florida, pertaining to the feeding of garbage to hogs. Prof. Willoughby's letter summarizes the situation very clearly and merits attention:

September 12, 1917.

Mr. George W. Simons, Jr.,  
State Board of Health, Jacksonville, Fla.

Dear Mr. Simons:

I have just been reading in the August issue of Health Notes an article in your department on "Feeding Garbage to Hogs." This is a good point, and it is wise to call the attention of our people to the opportunities of utilizing many waste materials of this sort. I find that some extensive hog

feeding establishments are being undertaken in the vicinity of several of the army and National Guard camps in the Southeast.

While this is a good method for conservation and economy, yet I wish very much that your article had pursued the matter a little further to help with still greater economy. It is a well known fact among those who watched the feeding of garbage and among many innocent people who have suffered, that there is often considerable loss from death and disease induced largely by feeding garbage in improper conditions, or swill in improper condition, or by using improper materials. There seems to be a thorn with every rose. There are a number of rules and precautions in connection with this feeding matter which should be urged and given publicity, in my opinion, just as strongly as any other part of the subject.

All the hotels and large institutions that have had experience in this matter find it necessary, as your article suggests, first—to keep the animals immunized against hog cholera, and you may have seen reports from Cornell University Experiment Station showing that it is possible in 25 per cent. of cases to transmit the virus of hog cholera through scraps of pork and discarded skins from breakfast bacon and hams that have been through the ordinary curing and smoking process in the packing houses. The second great precaution that has been found absolutely essential, is to keep the garbage and food particles perfectly and altogether fresh and sweet and in clean containers that are scalded or sterilized every day, or as a method still more perfect, it has been found best by most such feeders to sterilize all these materials by cooking from one to two hours and allowing the mass to cool properly before feeding to hogs. This precaution is, in my opinion, necessary in the Southern States because of the many warm days in which any material of this sort will ferment and produce ptomaines more rapidly than in other parts of the country. The hog is very susceptible to ptomaine poisoning and will succumb quickly to severe cases of this trouble.

The third great precaution is to see that garbage and swill contains only desirable feeding particles, such material as coffee grounds and other indigestible substances should not be placed in the material intended for hog feed, neither should any water containing soap or washing powders, especially strong lye, be allowed to go into the mixture. These strong mixtures and lye will injure the lining of the hog's stomach just the same as people.

I wish you might issue something further along this line in the next issue of Health Notes. Let me summarize briefly the points which will be found helpful in feeding garbage to hogs:

- 1—Keep animals immunized with hog cholera serum and virus.
- 2—Arrange to collect only digestible food materials.
- 3—Allow no dish-water, soap or lye powders in the mixture.
- 4—Feed the garbage absolutely sweet and fresh within an hour after placing in containers.
- 5—Clean, scald or sterilize with steam all garbage containers every day.
- 6—If in doubt, or when the food sours, cook thoroughly and cool before feeding.
- 7—Feed only enough of this material for the hogs to clean up each day.
- 8—Clean feed troughs daily and burn or dispose of any material refused by the hogs.

Very truly yours,

C. L. WILLOUGHBY.

(Signed)

CLW/V.

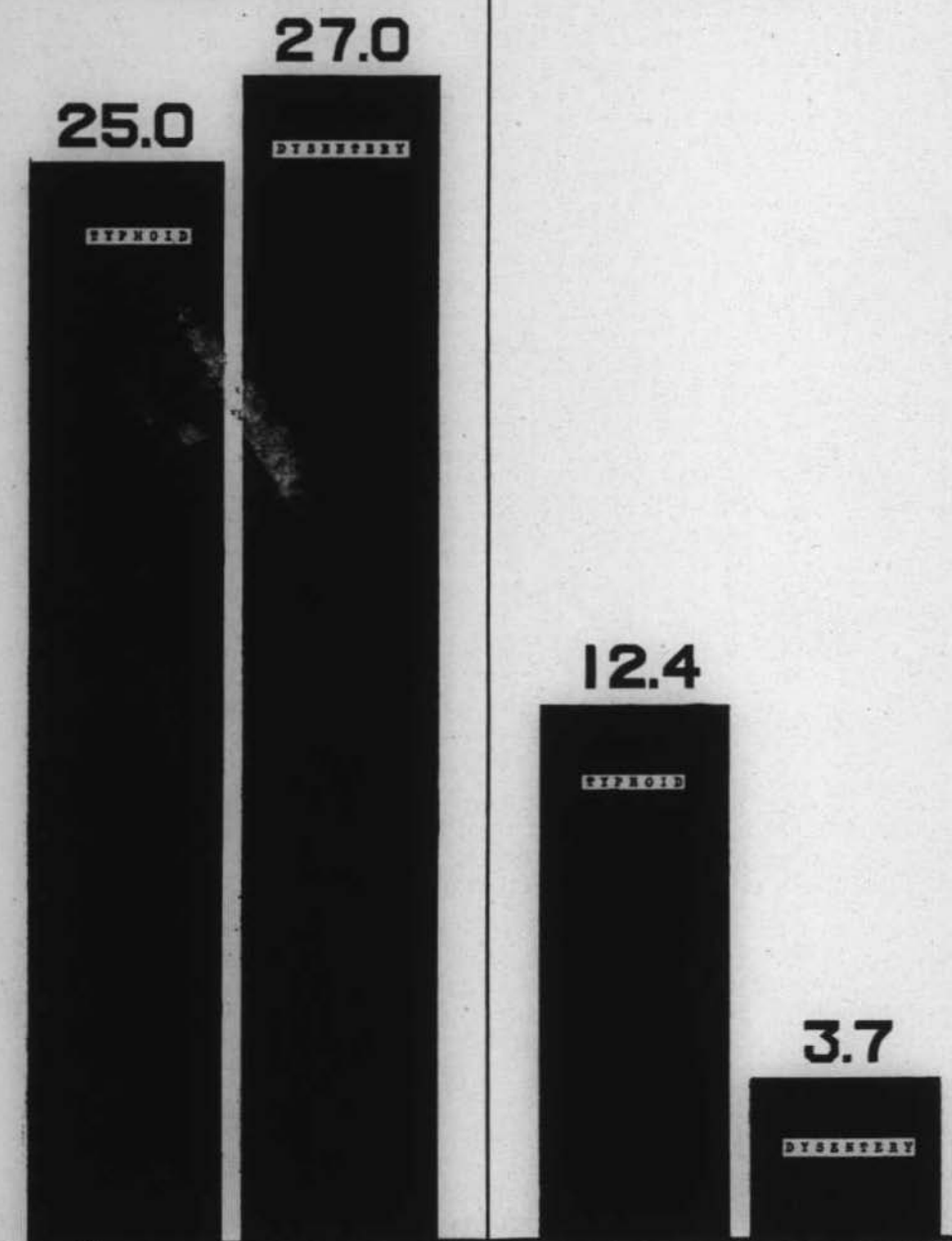
During these trying times when economy is being practiced on all sides, it is very important to utilize our wastes and minimize them as much as possible. Feeding garbage to hogs is one means of utilizing table waste and further acquiring profit.

# DEATH RATES

PER 100,000 POPULATION

## FLORIDA

## U.S.



# FLORIDA HEALTH NOTES



## OFFICIAL BULLETIN PUBLISHED MONTHLY BY THE STATE BOARD OF HEALTH

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## F O O D N U M B E R

*"You must still be bright and quiet,  
And content with simple diet."*

—Robert Louis Stevenson.

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# FLORIDA HEALTH NOTES

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## FOOD

The readers of **HEALTH NOTES** are favored this month with an article on Food Economics, by Miss Agnes Ellen Harris and Miss Gertrude York. Miss Harris is State Home Demonstration Agent, and Miss York, State Advisor in Home Economics. Capable teachers, both, and their ability shows to splendid advantage in this article. It should be read slowly and carefully. There is too much in it to get all out at one reading—it should be read several times and the copy then preserved for future reference.

Especially is it desired to call attention to a few features. For instance the buying in quantity. When you buy corn meal for five cents a pound in bulk or  $8\frac{1}{2}$  cents in packages—do you realize that the package costs 70% more than at the bulk price? This is something to think on. Puffed rice at 27c per pound is over 240% higher than best rice in bulk at 11c and does not contain a particle more food.

Another thing to note is the relative food value of certain articles. From the table on page 164, it is seen that one pound of cheese has as much food value as nearly thirty pounds of lettuce. Another table should be studied carefully. Quaker oats is rather old-fashioned, but still it has a high food value, and is wholesome, and costs only about half that corn flakes or grape nuts cost.

In this article such words as "protein" and "carbo-hydrate" and "calorie" and "nitrogenous foods" occur. It can't be helped—there are no other words that mean just the same thing, so it is necessary to use them. But a little explanation may be of some help in understanding them.

Protein, or proteid, is hardest to define. But the white of egg is almost pure protein. Lean meat contains a large portion of protein. Beans and peas contain considerable. By reference to page 165 it will be seen that lean meats as veal, mutton, pork, oysters, fowl, etc., have a preponderance of proteid.

Sugars and starches are more easily defined because we have both words in our every-day speech. And fats are easily understood also.

The hardest one perhaps is a Calorie.

What is a Calorie?

Food people are continually talking about "calories," and bread contains so many "calories," and meat so many, and milk so many—now just what is a calorie?

If you read this article, when you get through, you will know what a calorie is.

To begin with, it is a measure of heat. Let us stop right here and talk about heat. Heat is produced by burning coal, or wood, or oil, and so on. Heat is not produced by covering up with a warm blanket in bed—that is just a way of saving heat.

Now a very curious thing is that anything will burn. Even steel. A man lecturing on liquid air, heated a steel watch spring to

redness and stuck it in the liquid air, and it burned like a taper, emitting a white light that was so intense it was painful to look upon. He made old hair from a mattress burn like paper.

Meat, bread, anything will burn. And when it burns, it produces heat. And the faster it burns, the faster it produces heat, the slower it burns, the slower it produces heat. But—and this is important—IT PRODUCES THE SAME AMOUNT OF HEAT REGARDLESS OF HOW FAST OR HOW SLOW IT BURNS.

One more thing about burning. Burning is just a process of—chemists call it “oxidation.” It means oxygen uniting with something. When iron rusts, the oxygen of the air unites with the iron—it is a slow process of burning. So slow in fact that we can’t perceive the heat that is generated. When wood on the other hand oxidizes, or burns, it produces high heat.

Now when we take bread or meat, or fat into the stomach, it burns, or oxidizes, and does it rapidly enough to produce heat. That is what keeps us warm—the oxidation or burning of our food inside our bodies.

We still haven’t got to a Calorie. When you want to measure how hot an oven is you do it with a thermometer. If you want to run the heat higher, you increase the fire. The thermometer says the heat goes up so many degrees.

Just a word about thermometers and “degrees.” Every one knows how cold ice is and how hot boiling water is. These are two constant quantities so they are taken as starting points. Now on Fahrenheit thermometers, freezing is fixed at 32 degrees, and boiling is 180 degrees. But most scientific thermometers are made different. Ice is called zero and boiling is called a hundred, and the difference is, of course, a hundred degrees.

Now the thermometer is used to measure actual heat, understand, but suppose you want to know how much heat a ton of coal will yield when you burn it. The thermometer could not be used until you burn the coal. But from tests that have been made it can be calculated just how much heat a ton of coal will yield upon being burned, or just how much a pound of steak. And that is measured in this way: It takes a certain amount of heat to raise the temperature of a liter (which is about a quart) of water one degree, centigrade. That amount of heat is called a calorie.

Now we come to the interesting part. If a pound of bread is burned, it will produce enough heat to raise 1255 liters of water one degree centigrade; or as we say it contains 1255 “calories”; if a pound of cheese is burned it will yield enough heat to raise 2055 liters of water one degree centigrade; hence we say cheese or bread yields per pound, 2055 calories. And this is true whether the cheese or bread be burned in a furnace or burned in somebody’s body.

That’s what a calorie is—it is a measure of the heat that a given article will yield when burned, that a given food will yield when eaten.

## THE "CLEAN PLATE"

At this time the gospel of the "clean plate" should be driven home. It is unpatriotic to eat more than you need, and it is unpatriotic to take more upon your plate than you eat. To do either is to cut off the resources of the Allies—and thereby help the Germans. Indeed that is just what they want us to do—it is what they are doing with their submarines—wasting our food. Are you going to help the submarines or the French?

But suppose you do find a little more on your plate than you need, what then? Is there any way you can save it? Yes. It can be saved by being fed to a pig, where it is converted into meat and fat. It can be saved by being fed to chickens, where it is converted into eggs. It can be saved, in the average case, simply by eating it, in which case it will be stored up in your own body as fat to be used in future. In that case you eat a little more this time, and balance it by eating a little less next time. For at no time should you eat to the point where a little more will even make you uncomfortable.

## ECONOMY OF FOOD

"If once the public can disabuse its mind of any idea of close connection between 'food value' and cost—namely, that a cheap food is a poor food, that a dear food is a good food, then a beginning in scientific dietaries can be made. The cost of food is not only its money cost, it is the cost to the body to appropriate it."—Ellen Richards.

At the mention of the word "Economy" the average housewife shrugs her shoulders, and says she does not see how she can possibly economize any more and have anything to eat. There is all the more reason therefore for her to learn to use the accepted principles of nutrition. No matter what the meal costs if it does not satisfy the requirements of the body it is not economical. True economy can only come when the housekeeper not only wastes nothing in buying, cooking and serving, but when she knows that she is providing the kind and amount of food her family needs, within the amount allowable for her to spend. From various statistics it is evident that the average family consisting of father, mother and three children, with an income of \$1,000 must spend between \$250 and \$450 for food to have a maintenance; and only with the utmost care will that limit not be greatly exceeded this year. Some of the uneconomical practices of our neighbors which help to keep food prices up are: lack of care in buying and storing supplies, carelessness in cooking and serving, lack of forethought in planning meals, and real ignorance of food values. Staples should be purchased in large quantities and stored where they will be free from mice and insects. The saving that can thus be affected is readily seen in the case of oatmeal, bulk 7½c per pound; 12c per pound in package; or cornmeal, in bulk 5c per pound; in package 8½c per pound. To be sure package goods may be cleaner but they need not be if the dealer is as careful as he should be. Perishables must be purchased in small quantities, if there is to be any saving, especially in a damp climate like this. If one has a good refrigerator, even an iceless one, foods can be kept longer. Or if fuel is not a great item of expense odds and ends of vegetables and fruits can be dried for soup mixtures, purees, puddings, etc. Perhaps one of our most expensive habits is in buying "ready to eat" foods. Rice in bulk, best, 11c per pound; puffed rice, 27c per pound. Mistaken notions of hospitality demand that more be served than can possibly be eaten. Fortunately the "gospel of the clean plate" is changing such ideas. How much good material finds its way to the garbage bucket simply because it is not fit to eat! If the cook does not know her business she must be taught. Women's Clubs and Guilds in many of our cities are doing an excellent work in establishing schools for cooks where they can learn most practical everyday cookery. As much as care is necessary in using left-overs, much time, labor and fuel is wasted in concocting dishes the family will not eat. To be sure it is not always the cook's fault, for many of us "want what we want"



and will not be satisfied with anything else. There is great room for reform in our habits of eating. Transportation has been so easy that we have become accustomed to many foods from all parts of the world and sometimes fail to appreciate local food products. Rare foods, out of season fruits and vegetables, and fancy dishes have their place no doubt; but it is not on the table of the family counting every penny spent; and should be tabooed quite generally at this particular time. The place of flavor has been greatly overemphasized although no doubt it has an important use. How our mouths water at the mere mention of some delicious morsel! Scientists tell us all the other digestive juices are stimulated in a similar manner which would certainly aid in ease of digestion. The art of the cook must make a little flavor go a long way, as in the use of meats in stews, Shepherd pie, rice and meat en Casserole, minced meat on toast, etc. So that we may not too greatly miss the "flesh-pots of Egypt."

Our bodies might be likened to an automobile which must have intelligent care and exactly what is needed or be worse than useless. The chauffeur expects to furnish a good quality of gasoline, lubricating oil and certain repairs in the way of tires, innertubes and spark plugs. In return he expects his car to go a definite number of miles over good roads. If the road is poor or he drives a heavier car he knows he will need more gas and possibly more repairs. So the human body takes certain foods for fuel, others for regulating and still others for repair, although of course the same dish may contain fuel, regulating and repair material. Just how much is needed depends primarily on the amount of activity of the person and somewhat upon the size and age. The unit of measurement is the calorie. Just as we measure weight by pounds or bulk by quarts so we measure heat or energy by calories. In popular language a calorie is the amount of heat necessary to raise the temperature of a pound of water four degrees Fahrenheit. By careful experiments it has been found that a man of 150 pounds engaged in an active life needs fuel equal to 3,000 calories per day or about 20 calories per pound per day. A woman of average size but the same activity would, because of her smaller size, require about .8 as much as a man about 2,400 calories. If the work done is heavier more must be eaten. Maine lumbermen need about 6,000 calories per man per day. A man at sedentary work will probably not need more than that required for an active woman. Children require according to their ages, about as follows:

14-17 years, 25-20 calories per lb.	2300-3000 total calories per day
10-12 years, 30-25 calories per lb.	1800-2200 total calories per day
6-9 years, 35-30 calories per lb.	1400-2000 total calories per day
2-5 years, 40-35 calories per lb.	1200-1500 total calories per day
1-2 years, 40-40 calories per lb.	900-1200 total calories per day

The amount of protein, or repair material, necessary to supply nitrogen needed by the body depends upon the age and size of the



person as well as the kind of protein. It is usually estimated that 2.86-3.5 oz. protein from a varied diet is necessary for a man of 150 pounds, while a woman of average size would need about 2.5 oz. Mineral salts are necessary to build bones and teeth, maintain the neutrality of the blood, regulate the heart beat and nervous control.

Certain newly discovered substances as yet unnamed but designated as "Fat Soluble A" and "Water Soluble B" have been found necessary for promoting the growth of the young as well as properly maintaining the adult. Water is of the utmost importance in carrying food to the tissues and flushing out the wastes of the system.

The various foods are made up of complex mixtures of Proteins, Fats and Carbo-hydrates, each having a definite fuel value. For example:

1 lb. of lettuce yields.....	70 calories
1 lb. of asparagus yields.....	105 calories
1 lb. lobster yields.....	140 calories
1 lb. of oysters yields.....	230 calories
1 lb. of white potatoes, raw yields	310 calories
1 lb. of rice, raw yields.....	1630 calories
1 lb. of dried beans yields.....	1605 calories
1 lb. of lean beef yields.....	652 calories
1 lb. of beef heart yields.....	1320 calories
1 lb. of peanuts yields.....	1935 calories
1 lb. of butter yields.....	2825 calories
1 lb. of bread (white) yields.....	1255 calories
1 lb. of cheese (American) yields.	2055 calories

Dr. Graham Lusk gives some comparative costs of 1,000 calories in various foods, according to prices current in New York this summer:

Quaker Oats cost.....	.04	per 1000 calories
Cane Syrup costs.....	.05 $\frac{1}{2}$	per 1000 calories
Cream of Wheat costs.....	.06	per 1000 calories
Wheatena costs .....	.08	per 1000 calories
Quaker Cornflakes cost....	.08	per 1000 calories
Grape Nuts cost.....	.08	per 1000 calories
Animal Crackers cost.....	.11	per 1000 calories
Sunshine Cheese costs.....	.23	per 1000 calories
Nabisco Crackers cost.....	.32	per 1000 calories
Fancy Cheese costs.....	.41	per 1000 calories

If a man needs 3,000 calories and has only a little money to spend, it would be folly, if not tragedy, to spend that little on lobster or oysters rather than bread or cheese.

A rough classification of foods according to their chief constituents is as follows:

GROUP I.	GROUP II.	GROUP III.	GROUP IV.	GROUP V.
Characterized Chiefly by much Protein. Repair Foods	Foods charac- terized by much starch, carbo- hydrates. Fuel foods. Energy giving.	Foods charac- terized by much sugar, carbo- hydrates. Fuel foods. Energy giving.	Foods charac- terized by Fat. Fuel foods. Energy giving.	Foods charac- terized by min- eral salts and food accesso- ries. Body regulating.
Lean Meats, as Beef-Veal Mutton, pork Oysters Fowl Milk Cheese Eggs Beans, all kinds Peas, all kinds Peanuts Most other Nuts	Cereal Break- fast foods: Bread of all kinds Macaroni Spaghetti Oats Rice Cornmeal Grits Crackers Cakes Cookies Potatoes white and sweet Banana Hominy Chestnuts Corn starch pudding	Cane sugar Syrups Jellies Jams Preserves Candy Honey Dried fruits as: Dates Raisins, Figs, etc. Sweet cakes Desserts	Cream Butter Oleomarga- rine Lard Crisco Suet Bacon Pork Salt Pork Olive Oil Cottonseed Oil Peanut Butter Chocolate Egg Yolk Goose Oil Chicken Fat	Milk Egg Yolk Whole grains Spinach Cabbage Lettuce Celery All Greens: Green Beans and Peas Onions Turnips Carrots Beets Parsnips Potatoes Apples Pears Melons Oranges Lemons Berries Other fruits and vegetables

The housekeeper can feel reasonably safe if she has some of each of these food groups in at least two out of every three meals. When supplies are plentiful this is very easy as she can select meat, potatoes, bread and butter, lettuce with Mayonnaise, preserves, fruit with cream and cake. When the supply is limited the task becomes increasingly difficult and she feels at a loss to know just how far she can substitute within a group and still supply all the needs.

Take for instance Group 1. If we are to have "meatless days" what foods will furnish an equivalent in protein or repair material? The Ohio Branch Council of National Defense the past summer worked out the following interesting table:

FOOD	Protein Equivalent Equal to 1-lb. Lean Beef		Rela- tive Cost	Caloric Value
	Wt. in lbs.	Measure		
Walnut (in shell) .....	4		\$1.00	3,400
Chocolate .....	1½	1½ cake	.60	4,173
Fowl (as purchased) .....	1¼	1-3¼	.38	952
Eggs .....	1 1-6	Av. Size 1 doz.	.34	969
Salmon (canned) .....	1	1 large can	.30	654
Sardines (canned) .....	¾	3¾ cans 3½ oz. each	.30	757
Meat, lean beef .....	1	4 Av. serv.	.28	652
Cheese (American) .....	¾		.24	1,342
Milk, whole 4% Fat .....	5¾	2¾ qts.	.24	1,860

FOOD	Protein Equivalent Equal to 1-lb. Lean Beef		Relative	Caloric Value
	Wt. in Lbs.	Measure	Cost	
Macaroni, dry .....	1 2-5	2 1-5 boxes	.23	2,348
Peanuts in shell.....	1		.20	1,870
Lima beans, dry.....	1	2 3-8	.18	1,701
Cottage cheese .....	9-10	1 3-4	.18	463
White bread .....	1½	2+ loaves	.15	1,699
Hominy (dry) .....	2 1-3	5c	.14	3,763
Peas (dry) .....	5-6	1½c	.11	1,267

Unfortunately, however, the various proteins are not of equivalent value. Proteins are very complex substances, made up of seventeen or eighteen different simpler substances or "building stones." These simpler substances are capable of at least 350 million times a million combinations. Each of the proteins contain the combination necessary for its particular use, but not necessarily the right combination for the growth of protein tissue in the human body. Protein foods are broken down to these "building stones" in the process of digestion, rebuilt according to needs of particular tissue as muscle, liver, kidney, etc. It is like the old-fashioned alphabet game where one is given certain letters to make as many words as possible, only what is to be made is very definitely prescribed in this case. Suppose we have the word "legume" and we wish to make the word "muscle." There are not enough letters of the kind we need and some we cannot use at all, but if we are given another word, say, Casein, we can make the word muscle easily. Meats, fish and poultry proteins are nearest like human protein; eggs and milk are next. The beans, peas and peanuts contain a goodly portion of the protein alphabet. The fact that their protein is enclosed in meshes of cellulose demands that they be carefully cooked. They are easily fermented so are better utilized in quantity by people of active outdoor life. The grains are somewhat deficient in certain "building stones," and gelatin is notably lacking in those most important for growth. If meat is not to be used then, we must have a suitable combination of the other proteins. Two or more kinds of cereal do not help each other out, nor do two or more kinds of legumes—beans, peas or peanuts. Most legumes with cereals make a good combination. Gelatin supplies the lack in most cereals, but does not help out the legumes. But the combination of any of the protein foods with milk, whole or skim, cheese—American or cottage, eggs or meat is efficient.

In substituting different fats care must be taken to include some of those containing the growth promoting "fat Soluble A," such as butter, milk, cream, cream cheese and egg-yolk. There are very small amounts of the substance in the butter substitutes, suet, beef drippings; possibly some in goose and chicken fat. The vegetable oils seem to be altogether lacking and should not therefore be used exclusively especially in children's dietaries. However, quite a large percentage of expensive fats can be replaced in cookery by

less expensive ones if care is taken to secure the growth determinants from other sources. The following table is taken from "Ten Lessons on Food Conservation":

Exchange measures among fats equivalent to use in replacing butter in cooking.

FOOD	Wt. in oz. in 1c.	Wt. in oz. pure Fat in 1c.	Equivalent in Fat Content of 1c. Butter (16 Tbsp)
Butter .....	7 3-4 oz.	6.5 oz.	16 Tbsp
Oleomargarine ..	7 1-2	6.5	16 2-3
Lard .....	7 1-2	7.4	14
Hardened vegetable oil .....	7 +	7.2	14 1-2
Cottonseed oil....	7 +	7.2	14 1-2
Suet .....	3 1-2	2.8	37
Olive Oil .....	7 +	7.2	14 1-2
Cream .....	7 3-4	3.1	33
Chocolate, grated	2 2-3	1.3	80
Chocolate in cake	....	...	13 1-2 sq.

Wheat flour may be substituted at least one-half in any number of delicious hot and cold breads, recipes for which will be found in S. R. S. Document 64 No. A-91, "Partial Substitutes for Wheat in Bread Making," issued by the U. S. Department of Agriculture. The nutritive value of the cereals is practically the same so no fear need be felt in substituting rice, oatmeal or cornmeal for wheat.

Sugar is not a physical necessity to the human organism and its use can only be justified because of its flavor; except in cases where a large increase in energy is needed quickly, as for troops on the march.

Three ounces per day is sufficient and if syrups, honey and fruits, fresh and dried, were more largely used less cane sugar would be necessary.

1 pound (2-1.6c) granulated sugar is equivalent in fuel value to 1-1.20 pound (2 1-4 c) brown sugar

1-2.5 pound (1-9.10c) cane syrup

1-1.5 pound (2-1.6 c) honey, (strained)

Farmers Bulletin 653, Honey and Its Use in the Home, gives a number of excellent recipes for cakes, cookies and candy made of honey.

The use of fresh or dried fruits and vegetables as conservers of the staples cannot be over estimated. Most of the proteins leave an acid residue in the body which should be neutralized by the alkaline ash of vegetables. Besides vegetables are rich in the unknown "Water Soluble A," mineral salts and "roughage," the latter of great importance in keeping the digestive tract in good condition.

Farmers Bulletin 841, U. S. Dept. Agriculture, gives directions for drying fruits and vegetables and recipes for their use. F. B.



871, U. S. Dept. Agriculture also gives some excellent recipes for vegetable soups, chowders and souffles.

In planning meals care must be taken not to include too many of one kind of food—any one who thinks a moment would not wish to serve roast beef, macaroni and cheese, egg salad and custard at one meal, as it is too high in protein; nor cream soup, roast pork, creamed potatoes, avacado salad with Mayonnaise and Charlotte Russe, because of too much fat; while chicken, rice, white and sweet potatoes, biscuit, cake and cornstarch pudding is a combination too high in starch.

The following menus taken from Florida State College Bulletin No. 15, are "balanced" in the sense that the various food principles and food accessories are in correct proportion. The amounts are estimated for two men and two women of average size.

Number of meals per day: Three.

Place: Florida.

Date: 1917.

Two women of average size, with a daily requirement, each, of 2,350 calories.....	4,700 calories
Two men of average size, with a daily requirement, each, of 3,250 calories.....	6,500 calories
Total daily requirements.....	11,200 calories

### BREAKFAST

#### MENU

Sliced Guavas, with Sugar and Top Milk	Browned Hash
Hominy	Corn Meal Muffins
	Oleomargarine

Material	Measure	Ounces	Calories	Totals
<b>Sliced Guavas—</b>				
Guavas .....	1 lb.	16	317	
Sugar .....	4 tbsp	2	240	
Milk .....	5-8 cup	5.1	100	
Total.....				657
<b>Browned Hash—</b>				
Beef .....	3-4 lb.	12	1,169	
Potatoes .....	2	10 2-3	203	
Lard (for frying).....	2 tbsp.	1	234	
Salt and pepper.....				
Onion .....				
Total.....				1,606
<b>Hominy—</b>				
Grits .....	1-2 cup	2 3-4	277	
Water .....	2 cups			
Salt .....	1-2 tsp.			
Total.....				277
Oleomargarine .....	4 tbsp.	2	420	420
<b>Corn Meal Muffins—</b>				
Meal .....	1 1-2 cups	7 1-2	756	
Molasses .....	3-4 tbsp.	4-5	49	
Sour Milk .....	1 1-4 cups	10 5-8	110	
Egg .....	1	2 1-2	70	
Lard .....	4 tbsp.	2	420	420
Soda .....	5-8 tsp.			
Baking Powder .....	1 1-2 tsp.			
Salt .....	3-8			
Total.....				1,161
Totals.....				4,121



(169)

# DINNER MENU

Fried Flounder      Baked Irish Potatoes  
 Spinach      Sliced Tomatoes      Hoe Cake      Oleomargarine  
                                  Rice Pudding

Material	Measure	Ounces	Calories	Totals
<b>Fried Flounder—</b>				
Flounder .....	2 lbs.	32	257	
Lard (for frying).....	3 tbsp.	1 1-2	351	
Total.....				608
Baked Potatoes .....	8	42 3-5	809	809
Sliced Tomatoes .....	4	16	103	103
Spinach .....	1-5 peck	9 3-5	65	
Oleomargarine .....	2 tbsp.	1	210	275
Total.....				275
<b>Hoe Cake—</b>				
Corn Meal .....	1 1-2 cups	7 1-2	756	756
Salt .....	3-8 tsp.			
Water .....				
Oleomargarine .....	4 tbsp.	2	420	420
<b>Rice Pudding—</b>				
Milk .....	3 cups	25 1-2	510	
Rice .....	3-8 cup	3 3-16	261	
Molasses .....	3 tbsp.	2 2-5	195	
Oleomargarine .....	3-4 tbsp.	3-8	79	
Salt .....	3-8 tsp.			
Cinnamon .....	3-8 tsp.			
Total.....				1,045
Totals.....				4,016

# SUPPER MENU

Black-eyed Pea Croquettes with Tomato Sauce  
 Fried Potatoes (left-over)      Sour Milk      Corn Bread  
                                  Marmalade      Oleomargarine

Material	Measure	Ounces	Calories	Totals
<b>Croquettes—</b>				
Pea Pulp .....	1 cup	2.85	277	
White Sauce .....	1-2 cup			
Oleomargarine .....	1 3-4 tbsp.	7-8	184	
Corn Starch .....	2 tbsp.	2-3	68	
Milk .....	1-2 cup	4 1-4	85	
Salt and Pepper.....				
Onion Juice .....	1 tsp.			
Total.....				614
<b>Tomato Sauce—</b>				
Tomatoes .....	1-2 can	9.5	60	
Oleomargarine .....	2 tbsp.	1	210	
Corn Starch .....	1 tbsp.	1-3	34	
Onion Juice .....	1 tsp.			
Salt .....				
Pepper .....				
Total.....				304
Oleomargarine .....	4 tbsp.	2	420	420
Orange Marmalade .....	1-2 glass	4	386	386
<b>Corn Bread—</b>				
Meal .....	1 1-2 cups	7 1-2	756	
Sour Milk .....	1 1-2 cups	12 3-4	132	
Lard .....	1 1-2 tbsp.	3-4	176	
Molasses .....	1 1-2 tbsp.	1 1-5	98	
Eggs .....	2	5	140	
Salt .....	1 tsp.			
Soda .....	3-4 tsp.			
Total.....				1,302
Totals.....				3,026

## MENU No. 1

	Total for the Day
Breakfast .....	4,121 Calories
Dinner .....	4,016 Calories
Supper .....	3,026 Calories
	<hr/> 11,163 Calories

*Thick White Sauce*

1 cup milk	$\frac{1}{4}$ teaspoon salt
2 tablespoons butter	Pepper
2 tablespoons corn starch	

Melt the butter. Add the corn starch, salt and pepper, and stir the mixture until it is smooth. Add the milk, and stir the mixture until it thickens.

*Pea Croquettes*

1 cup pulp from cooked peas	$\frac{1}{2}$ cup thick white sauce
1 teaspoon onion juice	Salt and pepper

Combine the ingredients and allow them to stand for two or three hours. Shape this mixture into croquettes. Roll them in bread crumbs, beaten egg, and crumbs again. Fry them in deep fat.

*Tomato Sauce*

1 cup tomato juice and pulp	1 tablespoon corn starch
2 tablespoons butter or oleomargarine	$\frac{1}{4}$ teaspoon salt Cayenne pepper

Cook the tomatoes until tender and press them through a vegetable sieve. Melt the butter, add to it the flour, and rub them mixture to a smooth paste. Add the tomato juice and pulp and the seasoning. Stir the mixture constantly and cook it until it thickens.

*Corn Meal Muffins*

2 cups corn meal	1 tablespoon syrup
$\frac{1}{2}$ teaspoon salt	1 2-3 cups sour milk
5-6 teaspoon soda	1 egg
2 teaspoons baking powder	2 tablespoons lard (melted)

Mix the ingredients. Add the syrup and milk. Beat the egg and add it to the mixture. Add the melted lard. Bake the muffins in a hot oven twenty-five minutes.

*Corn Meal Sticks*

Use the above recipe and directions for mixing. Bake the mixture in greased bread stick molds. If iron molds are used, heat them before filling.

## BREAKFAST

## MENU

Bacon with Fried Bananas      Hominy  
Oleomargarine      Corn Meal Griddle Cakes      Syrup

Material	Measure	Ounces	Calories	Totals
Bacon .....	12 slices	4	649	
Bananas (fried in bacon fat) ..	2	10	180	
Total .....				829
Hominy .....	1 cup	5 1-2	553	553
<b>Griddle Cakes—</b>				
Corn Meal .....	1 cup	5	504	
Flour .....	1-3 cup	1 1-3	132	
Cane Syrup .....	1 tbsp.	4-5	65	
Sour Milk .....	1 1-3 cups	11 1-3	117	
Egg .....	1	2 1-2	70	
Lard .....	1 tbsp.	1-2	117	
Salt .....	3-8 tsp.			
Soda .....	2-3 tsp.			
Baking Powder .....	1 1-3 tsp.			
Total .....				1,005
Cane Syrup .....	1-2 cup	6	488	488
Oleomargarine .....	4 tbsp.	2	420	420
Total .....				3,295

## DINNER

## MENU

Baked Fish, Tomato Sauce      Mashed Potatoes  
String Beans      Muffins      Ambrosia

Material	Measure	Ounces	Calories	Totals
<b>Baked Fish—</b>				
Fish (Black Bass) .....	1	40	503	
Fat Salt Pork .....		1 1-2	333	
Total .....				836
<b>Tomato Sauce—</b>				
Cooked Tomatoes .....	1-2 can	9.5	60	
Oleomargarine .....	1-2 tbsp.	1-4	53	
Corn Starch .....	1 tbsp.	1-3	34	
Totals .....				147
<b>Mashed Potatoes—</b>				
Potatoes .....	4	16	304	
Milk .....	2 tbsp.	1 2-5	28	
Oleomargarine .....	1 tbsp.	1-2	105	
Totals .....				437
<b>String Beans—</b>				
Beans .....	1 quart	15	165	
Oleomargarine .....	2 tbsp.	1	210	
Total .....				375
<b>Muffins—</b>				
Meal .....	2 cups	10	1,008	
Molasses .....	1 tbsp.	4-5	65	
Sour Milk .....	1 2-3 cups	14	147	
Egg .....	1	2 1-2	70	
Lard .....	2 tbsp.	1	234	
Salt .....	1-2 tsp.			
Soda .....	5-6 tsp.			
Baking Powder .....	2 tsp.			
Total .....				1,524
<b>Ambrosia—</b>				
Cocoanut .....	1-2 cup	2	334	
Oranges .....	3	24	254	
Sugar .....	4 tbsp.	2	240	
Total .....				828
Totals .....				4,147

# SUPPER MENU

Omelet                      Toasted Muffins                      Oleomargarine  
 Avocado and Lettuce Salad  
 Fresh Figs with Cream and Sugar

Material	Measure	Ounces	Calories	Totals
<b>Omelet—</b>				
Eggs .....	6	15	420	
Oleomargarine .....	2 tbsp.	1	210	
Salt .....				
Pepper .....				
Water .....				
Total .....				630
<b>Toasted Muffins—</b>				
Corn Meal .....	2 cups	10	1,008	
Molasses .....	1 tbsp.	4-5	65	
Sour Milk .....	1 2-3 cups	14	147	
Egg .....	1	2 1-2	70	
Lard .....	2 tbsp.	1	234	
Salt .....	1-2 tsp.			
Soda .....	5-6			
Baking Powder .....	2 tsp.			
Total .....				1,524
<b>Avocado Salad—</b>				
Avocado .....	1	16	512	
Lemon .....	1	3.8	25	
Salt and Pepper .....				
Total .....				537
<b>Figs and Cream—</b>				
Figs .....	1 qt.	15	370	
Cream (thin) .....	1-3 cup	2 2-3	147	
Sugar .....	3 tbsp.	1 1-2	180	
Total .....				697
Oleomargarine .....	4 tbsp.	2	420	420
Totals .....				3,808

Total for the Day

Breakfast ..... 3,295 Calories  
 Dinner ..... 4,147 Calories  
 Supper ..... 3,808 Calories

11,250 Calories

## Corn Meal Batter Bread

Use the recipe for corn meal muffins. When the ingredients have been combined, fill a square pan to a depth of one inch. Bake in a hot oven twenty-five to thirty minutes. When the bread is done, cut it into squares.

## Corn Meal Griddle Cakes

1½ cups corn meal	1 tablespoon syrup
½ cup flour	2 cups sour milk
½ teaspoon salt	1 egg
1 teaspoon soda	2 tablespoons lard (melted)
2 teaspoons baking powder	

Mix the dry ingredients. Add the syrup and milk. Beat the egg until light and add it to the mixture. Add the melted lard and pour the batter by spoonfuls on a greased griddle.

# **BREAKFAST** **MENU**

**Salt Mackerel**  
**Hominy Gems**

**German Fried Potatoes**  
**Oleomargarine**

Material	Measure	Ounces	Calories	Totals
<b>Salt Mackerel—</b>				
Fish .....	2 lbs.	32	713	
Oleomargarine .....	2 tbs.	1	210	
Total .....				923
<b>German Fried Potatoes—</b>				
Potatoes .....	1 lb.	16	304	
Lard .....	2 tbsp.	1	234	
Total .....				538
<b>Hominy Gems—</b>				
Hominy .....	1-8 cup	3-4	69	
Salt .....	1-4 tsp.			
Boiling Water .....	1-4 cup			
Scalded Milk .....	1-2 cup	4 1-4	44	
Corn Meal .....	1-2 cup	2 1-2	252	
Molasses .....	1 1-2 tbsp.	1 1-5	98	
Oleomargarine .....	1 1-2 tbsp.	3-4	158	
Eggs .....	1	2 1-2	70	
Baking Powder .....	1 1-2 tsp			
Total .....				691
Oleomargarine .....	4 tbsp.	2	420	420
Totals .....				2,572

# **DINNER** **MENU**

**Boston Baked Beans**  
**Boiled Irish Potatoes**  
**Buttermilk**

**Stuffed Egg Plant**  
**Corn Meal Breadsticks**  
**Guavas, Sugar and Cream**  
**Butter**

Material	Measure	Ounces	Calories	Totals
<b>Stuffed Egg Plant—</b>				
Egg Plant .....	1 lb.	16	57	
Breadcrumbs .....	1-2 cup	1 1-2	120	
Oleomargarine .....	2 tbsp.	1	210	
Egg .....	1	2 1-2	70	
Total .....				457
<b>Boiled Potatoes—</b>				
Potatoes .....	4	16	304	304
<b>Corn Meal Sticks—</b>				
Corn Meal .....	2 cups	10	1,008	
Molasses .....	1 tbsp.	4-5	65	
Sour Milk .....	1 2-3 cups	14	147	
Egg .....	1	2 1-2	70	
Lard .....	2 tbsp.	1	234	
Baking Powder .....	2 tsp.			
Soda .....	5-6 tsp.			
Salt .....	1-2 tsp.			
Total .....				1,524
<b>Boston Baked Beans—</b>				
Beans .....	1 cup	7	684	
Salt Pork .....	1-8 lb.	2	321	
Molasses .....	1 tbsp.	4-5	65	
Total .....				1,070
Buttermilk .....	4 glasses	25 1-2	264	264
Oleomargarine .....	4 tbsp.	2	420	420
Guavas .....	6	16	317	
Cream (thick) .....	1-2 cup	3 7-8	418	
Sugar .....	4 tbsp.	2	240	
Total .....				975
Totals .....				5,014



# SUPPER MENU

Peanut Loaf with White Sauce      Individual Corn Dodgers  
Butter      Lemonade  
Lettuce Salad with Sour Milk Dressing

Material	Measure	Ounces	Calories	Totals
<b>Peanut Loaf—</b>				
Peanuts (chopped) .....	1 cup	3 7-10	575	
Potato (mashed) .....	1 cup	6.2	200	
Milk (whole) .....	1-4 cup	2 1-8	42.5	
Eggs .....	1	2 1-2	70	
Salt .....				
Pepper .....				
Total .....				887.5
<b>White Sauce—</b>				
Milk (whole) .....	1 cup	8 1-2	170	
Oleomargarine .....	3 tbsp.	1 1-2	315	
Salt and Pepper .....				
Cornstarch .....	1 1-4 tbsp.	1-2	42.5	
Total .....				527.5
<b>Corn Dodgers—</b>				
Meal .....	2 cups	10	1,008	
Lard .....	2 tbsp.	1	234	
Salt .....				
Boiling Water .....				
Total .....				1,242
<b>Lemonade—</b>				
Lemons .....	3	4 1-2	45	
Sugar .....	6 tbsp.	3	360	
Total .....				405
<b>Lettuce Salad—</b>				
Lettuce .....	1-2 lb.	8	36	
Sour Milk .....	1-2 cup	4 1-4	44	
Sugar .....	1 tbsp.	1-2	60	
Vinegar and Salt .....	2 tbsp.			
Total .....				140
Oleomargarine .....	4 tbsp.	2	420	420
Totals .....				

Total for the Day

Breakfast ..... 2,572 Calories  
Dinner ..... 5,014 Calories  
Supper ..... 3,622 Calories

11,208 Calories

## Peanut Loaf

1 cup mashed Irish potatoes      1/4 cup milk  
1 cup finely ground peanuts      2 eggs, beaten ; seasoning

Combine the ingredients, and shape the mixture into a loaf, bake it in a moderate oven for twenty minutes. Serve the loaf with white sauce.

## BULLETINS

In addition to the Bulletin mentioned the following publications of interest to the housewife may be obtained free by addressing,  
**GERTRUDE I. YORK,**

State Advisor in Home Economics,  
 Tallahassee, Fla. :—

Ten Lessons on Food Conservation.

Farmers Bulletin 34, Economical Use of Meat in the Home.

Farmers Bulletin 142, Principles of Nutrition and the Nutritive Value of Foods.

Farmers Bulletin 487, Cheese and Its Economical Use in the Diet.

Farmers Bulletin 594, Ways of Preserving Eggs.

Form 777, Use of Poultry Club Products.

A1 17, Simple Directions for Making Cottage Cheese.

A1 18, Ways of Using Cottage Cheese.

Florida State College for Women :

Bulletin 12, Farm Butter Making.

Bulletin 13, Home Canning of Meats.

Bulletin 14, Home Drying of Vegetables and Fruits.

Bulletin 15, Moderate Cost Menus and Recipes from Florida Food Materials.

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## THE BACTERIOLOGY OF CANNING

The canning clubs may not all know it, but they are practical bacteriologists, just the same. Every move they make is made strictly in accordance with bacteriological laws, and whenever and where ever those laws are violated, something goes wrong.

When food decomposes, it is the result of bacterial activity. Where do these bacteria come from? Everywhere. They don't have to come—they are already there. On the tomatoes, in the cans, the lid, on the hands, knives, pans, trays, in the water, and it is the job of the canner to kill all these germs, so that in the final wind-up, there will not be one left in the can. When that is done, the fruit, vegetables, or whatever is canned will be preserved.

That is what boiling is for—that kills the germs of decay, putrefaction, or whatever you please to call them. But warm water will not kill them—*hot* water will not. Have it so hot you can hold your hand in it—they thrive in that. It must be boiling, and then it must boil some time. And that doesn't kill all of them. They are awful hard to kill. Some of them especially. Some of them are said to form "spores," whatever that is. And then they are harder to kill than ever. In fact it is doubtful if you can kill spores by boiling. Spores are—well, they are the seeds, of germs, and can lie there like seed corn for months, and then start up to growing germs right off. But if you put them in a good place to grow they won't wait but they get busy. The tomato spoiling spores don't want any better place than in a tomato can. Soon as your back is turned

they go to hatching and then the jig is up. But canners have outwitted them. They put up the tomatoes and boil them and seal them, and then go off like they are through with that can, and then the spores get busy. Then next day the canner comes back, boils them again and every one that has hatched out of his spore shell gets killed that time. Then the canner goes away again, and the rest of the spores hatch out and next day the canner boils them once more. And then the spores are all dead. And the canner calls this the "three day process."

The bacteriologist calls that sterilizing. He sterilizes his culture media that way. So after all, canning is nothing but sterilizing or, if you choose, disinfecting—you disinfect the fruit or vegetables, and you disinfect the can.

I recently saw a good woman putting up fruit in glass jars with rubber gaskets. She knew she must boil the fruit, and the jar, and the lid, and the rubber, all of which she religiously did, and then she put the fruit into the jar while the fruit was hot as blazes, and that was proper. But she let the lids and rubbers cool so that she could handle them with her hands. (She hadn't boiled her hands; besides she had been handling other things that were not boiled). I tried to explain to her but she insisted it would "keep"—she had done it before. Certainly some of it would keep, but just as certainly sooner or later she would introduce some germs from her hands to the lid or the rubber, and there goes a perfectly good can spoiled. A little more care—an understanding of the reason for things would prevent many a can spoiling.

But there is something more important than merely losing the fruit, or vegetables or meat. Sometimes germs are introduced and grow there that causes putrefaction, and converts wholesome food into deadly poisons. We often hear of "food poisoning" and "ptomain poisoning" and "botulism," and so on. That is the way it happens—the product is not thoroughly "disinfected" through and through, at the time it is put up. It is too late when some one is deadly sick from eating it. The prime thing is to **KNOW WHY YOU DO IT**, and then **DO IT AS THOROUGHLY AS IF YOUR VERY LIFE DEPENDED UPON EVERY CAN**, which indeed it may.

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## FOOD AND DISEASE

Food may effect the health in a great variety of ways. M. J. Rosenau of Harvard tabulates the following:

(a) Foods may be naturally poisonous, as in the case of certain mushrooms, some fish, or the alkaloids of certain species of plants.

(b) Poisonous substances may develop in the food as a result of bacterial activity. Sausage poisoning is a case in point. The so-called ptomain poisons occur in this way. (See article in this issue: "The Bacteriology of Canning"), Left-over food, as meats and

vegetables, are usually put in the refrigerator for subsequent use. That is proper if the refrigerator is kept cold, but if the ice is allowed to run out, the germs of decay get busy right off, and soon chemical changes take place that are of the most profound importance. Very potent poisons may be formed. And what is more, such poisons may be formed without affecting the taste or smell of the food. When acids form we say it is sour, but we can't detect some things more important than acids.

(c) Foods may convey foreign or accidental poisons. This class includes mostly the metallic poisons and chemicals added as adulterants. Adulteration of food is not practiced as widely now as we suppose it formerly was.

(d) Foods may contain animal parasites, such as trachina, and tapeworms. For instance measly pork has the trachina and beef may in some cases transmit tapeworms. Not, however, when the meats are thoroughly cooked, that is to say, "disinfected," through and through.

(e) Foods may contain vegetable parasites. Food that is contaminated may carry the germs of disease. A case in point is when flies carry the germs of typhoid fever from the stools of the sick to the food of the well.

(f) Foods may contain special poisons, as for example, "solanin" in sprouted potatoes, ergot in rye.

(g) Food may be injurious because of too much. Gluttony predisposes to abesity and arterio-sclerosis, which is a disease of the blood vessels, and often results in death. Not enough food undermines the health. A monotonous diet, especially of polished rice, leads to beri-beri. Lack of acids of an organic nature, leads to scurvy; defective alimentation, especially of lime salts, leads to rickets. Highly spiced and irritation diets, may have some effect upon the intestinal tube as well as the organs of excretion, the kidneys. An unbalanced ration is apt to be harmful. Too much proteids lead to intestinal putrefaction with the dangers of auto-intoxication. Eating when fatigued causes indigestion. Drinking too little water is a dietetic error—**DRINK PLENTY OF WATER AND DON'T BE AFRAID OF IT.**

(h) Finally foods may not be poisonous in themselves, but may be harmful to persons who lack ability to digest them. I knew a baby once whose bowels were thrown out of kilter every time potatoes were fed it till it was about three years old. Certain forms of protein produce symptoms in certain individuals. Certain fish may make certain people have nettel-rash.

From all of which it is seen that food may be directly and indirectly the cause of much suffering.



## WAR AND THE PUBLIC HEALTH

The American Association for Study and Prevention of Infant Mortality, met at Richmond, October 15-17. This organization is eight years old, and meets once a year. This year, on account of the war, it was proposed not to hold the usual annual meeting. But after mature deliberation, the meeting was held, as noted above. And while it was not as large as heretofore, it was composed of serious minded people, who were there for work and not play.

From the papers and discussions, it would appear that the members as a whole are united on several things, among which: that the death rate among infants is entirely too high; that it is higher among the rural population than the urban; that a large percentage of the deaths among infants is preventible; that better medical service for the mother as well as the baby, and better dietetics, and better nursing, and above all—*more of it*—is the way to reduce the death rate among infants. And especially was it emphasized that the thing, of all the world most needed now, to meet the war situation is "man-power," and that this will be the urgent need for at least a generation to come; and that that nation which best conserves its man-power during the next generation will recover quickest from the devastations of the war.

It was the concensus of opinion and experience that the most crying need to conserve this baby life is well-trained public health nursing. Indeed the organizations are most envied that have the best nursing force. (Virginia has about ninety public school nurses).

Much time was devoted to the unmentionable diseases, better known in literature as the "social" diseases.

### THE MEETING IN WASHINGTON

Following close on the heels of the meeting in Richmond, was the meeting of the American Public Health Association in Washington. This association is forty-five years old, and stands today as it has always stood—the clearing-house for public health activities. It is composed of health officials, philanthropists, sociologists, engineers and so on, and comprises the four countries, America, Canada, Mexico and Cuba. A perusal of its transactions from the time it was organized in the 70's, is to see the unfolding of medicine and public health administration, from their very beginning to now—from the time there were almost no State Boards of Health, to the time when there are no States without them; from the time we knew not germs to the time of their dominating influence in human conservation. It was before that body that microbes and disease were early considered; that Koch's tubercle bacillus was tried and convicted of causing tuberculosis; that the diphtheria bacillus was found guilty, and the bacillus of leprosy; it was here that Carlos J. Finlay, along in the 80's maintained that yellow fever was transmitted by the mosquito, and a decade later that another species of mosquito was brought before the bar for transmitting malaria.



It was before than body that diphtheria anti-toxin and later a large series of anti-toxins, were brought before the public. It is through the influence of this body that vital statistics are being collected, laboratories operated, sociological work being done; that eugenics is being recognized as a necessary step to the highest attainable in working out the destinies of man.

And today as never before this organization permeates and directs all these various activities for the betterment of man's condition. While the allied nations struggle to make the world safe for democracy, the American Public Health Association struggles to prevent needless disease and premature death—to mitigate suffering—in fine to make the world a fit place for the abode of man.

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The meeting in Washington was unlike any we have had before. It was a war program. A large portion of the discussion clustered round the army, made and in the making. As, Dr. Evans, the President, well said, "This year's program is devoted largely to our first line of defense." But it must not be inferred from this that the second line of defense, namely the civilian population, suffered any neglect, by what the first line got. There were many papers and addresses run in that were not on the published program. Extra meetings were held not previously announced, which gave the needed time to amplify.

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Dr. Evans, of Chicago, was president, and a magnificent leader. A little incident will tell how he stands in the hearts of the members. It has always been customary to pass the presidency around from year to year, a custom, which, so far as I know, has never been violated. It almost amounts to an unwritten law. But, on this occasion, the Advisory Council unanimously nominated Dr. Evans for a second term as President. For lack of physical strength to carry the load with his other responsibilities, the nomination was graciously declined. It took two things to bring an incident like that to pass—a war and a Doctor Evans.

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The meeting felt a personal loss in the absence of Dr. Gunn, of Boston, who for several years has been Secretary. Dr. Gunn is in France. When Dr. Gunn left, he left in his stead Mr. Hedrich, who is now Secretary. It will not require a prophet or the son of a prophet to predict that Mr. Hedrich will be heard from.

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Dr. Hastings, of Toronto, was elected President. Dr. Hastings will be a fit successor to such men as Evans, Anderson, Sedgwick, and on back to 1872, when the first President was elected—Dr. Stephen Smith, of New York, who, I understand is still living.

Among the stalwart figures in American public affairs, these forty-five Presidents certainly make a splendid showing.

The organization itself began in 1872, when a few men for several years had known each other and were working along similar lines more or less closely associated with preventive medicine, met on the 18th of April, and decided to organize. A committee on constitution was appointed and they met again in September of the same year, adopted the constitution, elected officers, and thus started what has grown to be the most important organization of its kind in the world.

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Public health organizations feel that they have been robbed of their birth-right, when they are not represented at these annual meetings. Certain it is that the man in the public health trenches is better prepared to meet and cope with his own problems when he gets back to them. Besides he needs something once or twice a year to cheer him up. Practically all of the States and many of the cities are accordingly represented. But it is unusual for a State to have as generous a representation as Florida had in Richmond and Washington. There were present about a dozen, say nothing of the wives. Dr. B. L. Arms, Chief of the Bacteriological Laboratories of the State Board of Health, was made a member of the Board of Directors of the Association.

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Dr. W. H. Cox, State Health Officer, was scheduled to attend, but it happened that Dr. John McMullen of the U. S. Public Health Service was on a detail in Florida at the time, and Dr. Cox graciously remained at home, while his assistants represented him at the meetings.

HUMAN LIFE IS THE STATE'S GREATEST ASSET

# FLORIDA HEALTH NOTES



## OFFICIAL BULLETIN PUBLISHED MONTHLY BY THE STATE BOARD OF HEALTH

EDITED BY DR. W. H. COX, STATE HEALTH OFFICER

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Bureau of P. H., Div.  
San. Rpts. and State

# FLORIDA HEALTH NOTES

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## INSTITUTIONAL CARE OF THE TUBERCULAR IN FLORIDA

What is our State doing to care for those who have tuberculosis? Perhaps it is well first to dispose of the argument that institutional care is not necessary; that people can be treated in their own homes. Theoretically this is true. An intelligent person of careful habits under the care of a competent physician may not be a source of danger to others. But statistics show that, on the average, in those families where there is a case of tuberculosis, 60 per cent. of the members of the family become infected. Is it worth the risk?

Recently, in company with a city health nurse, I visited several families. In one home a mother is seriously ill and examination by Dr. McGinnis, a physician well known as a specialist in consumption, divulged the terrible fact that two of her four little children already are infected. In the next home a man is coughing away his last hours. Three of his six children are infected. If parents are left where they infect their own children and these little tots are not carefully guarded for years in order to overcome the infection, they are doomed. When we know that multitudes of people are ignorant or careless regarding their personal habits it is not only foolish but dangerous not to put them in suitable institutions, where there is practically no danger of infection. One sanatorium in Denver has cared for 19,000 patients yet not an attendant has ever contracted this dread malady. You are safer in a good institution than in the average school house, church or moving picture house. What is Florida doing to save her citizens from infection?

*There is not a single public sanatorium, State, County or Municipal, in the whole State.* A few counties provide a special pavilion for tuberculous inmates at the county farm or hospital. Duval County has twenty-seven beds; Dade County has ten beds. The care and treatment is not adequate. If you go insane you will get the best care provided by the State, for there are twenty-four beds at Chattahoochee. If you break into the penitentiary you will find a special pavilion at Raiford. The present structure is utterly unsuited to the need of the inmates but the efficient and interested physician in charge has been authorized to furnish plans for a new, well equipped pavilion. Tampa, in 1916, opened a dispensary for its tuberculous citizens. Any physician may avail himself of the services of the State laboratories for the examination of sputum. The present number of Health Notes is an offering of the State Health Department to aid in the Anti-Tuberculosis Campaign. The State Board also has published several good pamphlets for free distribution. But this is not enough. The State Health Officer and the President of the State Board of Health both promise their aid in the Anti-Tuberculosis fight but state that they have not the funds to carry on the work. If that is the case then it is up to the citizens of the State to see that funds are provided, *for the fight must be made. It is a question of life or death.* There were nearly 200 people died of tuberculosis in the State last year above what the



deaths would have been if our death rate had been only that of the average of the United States. Their deaths are a challenge to the voter who votes for low taxes. Low tax rate, high death rate! Save money, lose lives!

It is estimated that the per capita cost of State and local health expenditures in Florida is 50 cents per capita. Cuba spent \$2.00 per capita and wiped out yellow fever. Did it pay? What is Florida going to do about the Great White Plague? How about trying a dollar per capita? That is our slogan—"A dollar a head for Public Health."

—J. B. L.

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### WORK OF WOMEN'S CLUBS FOR PUBLIC HEALTH

The Public Health Department of the Florida Federation of Women's Clubs has, up to the present time, done the larger part of the volunteer work in the fight against tuberculosis. For the past two years this work has been under the efficient supervision of Dr. Grace Whitford, of Ozone, Pinellas County. Dr. Whitford is accomplished both as physician and author. Few who do not know intimately of what it means to direct the sale of a quarter of a million Red Cross seals appreciate the great labor which for months she has devoted with unflagging zeal to this great service for Public Health.

The vice-chairmen of the Anti-Tuberculosis Section of the Public Health Department of the F. F. W. C. are Mrs. E. Van Hood, of Ocala, and Dr. Sarah E. Wheeler, D. O., of Lakeland. On October 10th an agreement was signed between Dr. Whitford and Dr. Leeds, of the Florida Anti-Tuberculosis Association, whereby the two organizations will co-operate in an active campaign for the sale of Red Cross seals throughout the State. This seems a more desirable plan than for the F. A. T. A. to start branches all over the State. The two officers above mentioned have agreed on a tentative plan for the fight against tuberculosis which was discussed fully at the November meeting of the two organizations in Tampa.

---

### THE FLORIDA ANTI-TUBERCULOSIS ASSOCIATION

Several years ago the work of this Association was started in this State under the title of the "Red Cross Seal Commission of Florida" with Dr. Carroll H. Frink, Jacksonville, chairman; Mrs. T. V. Moore, Miami; Dr. John D. MacRae, Tampa, and Mrs. T. M. Shackelford, Tallahassee, vice-chairman; Mrs. Walter P. Corbett, Jacksonville, secretary; Mr. Fred W. Hoyt, Jacksonville, treasurer. In 1915 the name was changed to the Florida Anti-Tuberculosis Association, with Dr. Bize, Tampa, chairman; Mrs. Frank S. Jennings, Jacksonville, vice-chairman; Dr. Frink, secretary; Mr. Hoyt, treasurer. Dr. Frink resigned recently, owing to his having accepted the office of State Director of the Red Cross, which fully occupies the time he can spare from dental surgery. He has been

succeeded by Mrs. Corbett. This organization is a State branch of the National Anti-Tuberculosis Association, 105 E. Twenty-second Street, New York City. Acting on the urgent advice of the National Association the Florida Association decided to secure the services of an executive secretary who would give all of his time to the State-wide campaign against the Great White Plague. Dr. John B. Leeds accordingly opened headquarters, September 1st, in rooms of the Red Cross in the Duval Theatre Arcade, Jacksonville. From this office the Red Cross seals and literature will be sent out.

Dr. Leeds has for the past five years been Professor of Sociology at Temple University, Philadelphia. His Master's degree was obtained at the University of Pennsylvania, and the degree of Doctor of Philosophy from Columbia University. In July of this year he published a book on "The Household Budget." He recently made a rapid tour through the State of Florida meeting the officers of the Woman's Clubs who will sell Red Cross seals, interesting officers of the Red Cross in this branch of their national organizations' activities, presenting to County Superintendents of Public Instruction the desirability of introducing the "Modern Health Crusaders" movement into the schools, giving brief talks in high schools and churches, getting acquainted with editors of the local papers, learning about local health conditions from town and county health officers, advocating everywhere the necessity of county sanatoria and nurses, preparing material for this number of "Health Notes," and incidentally getting acquainted with the general health situation in the State. After this tour he returned to headquarters about November 15th, and took charge of sending out the supplies for the Red Cross seal campaign. Later on in the year he hopes to take a more leisurely tour of the State, lecturing in all the principal towns.

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### THE RED CROSS SEALS

Nearly every one in Florida, in fact in the whole United States, must by this time be acquainted with Red Cross seals. They are little stamps about the size of a postage stamp, which nearly everybody buys now and puts on Christmas letters and parcels. For the past three years they have borne a pictured head of Santa Claus. This year a new design has been evolved, a beautiful snow-covered Christmas tree. The Red Cross first undertook the sale of these seals in 1907, selling \$450,000 worth that year. In 1915 receipts were about \$750,000, and last year they exceeded a million dollars. That means that over a hundred million seals were sold in the United States, for each seal sells for one cent. In Florida in 1914, there were sold over 200,000 seals; in 1915 over 280,000 seals; in 1916 over 360,000 seals. But this has been only getting started. The aim of the Florida Anti-Tuberculosis Association is to sell three seals for each citizen of the State. In December there will

deaths would have been if our death rate had been only that of the average of the United States. Their deaths are a challenge to the voter who votes for low taxes. Low tax rate, high death rate! Save money, lose lives!

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Several years ago the work of this Association was started in this State under the title of the "Red Cross Seal Commission of Florida" with Dr. Carroll H. Frink, Jacksonville, chairman; Mrs. T. V. Moore, Miami; Dr. John D. MacRae, Tampa, and Mrs. T. M. Shackleford, Tallahassee, vice-chairman; Mrs. Walter P. Corbett, Jacksonville, secretary; Mr. Fred W. Hoyt, Jacksonville, treasurer. In 1915 the name was changed to the Florida Anti-Tuberculosis Association, with Dr. Bize, Tampa, chairman; Mrs. Frank S. Jennings, Jacksonville, vice-chairman; Dr. Frink, secretary; Mr. Hoyt, treasurer. Dr. Frink resigned recently, owing to his having accepted the office of State Director of the Red Cross, which fully occupies the time he can spare from dental surgery. He has been

succeeded by Mrs. Corbett. This organization is a State branch of the National Anti-Tuberculosis Association, 105 E. Twenty-second Street, New York City. Acting on the urgent advice of the National Association the Florida Association decided to secure the services of an executive secretary who would give all of his time to the State-wide campaign against the Great White Plague. Dr. John B. Leeds accordingly opened headquarters, September 1st, in rooms of the Red Cross in the Duval Theatre Arcade, Jacksonville. From this office the Red Cross seals and literature will be sent out.

Dr. Leeds has for the past five years been Professor of Sociology at Temple University, Philadelphia. His Master's degree was obtained at the University of Pennsylvania, and the degree of Doctor of Philosophy from Columbia University. In July of this year he published a book on "The Household Budget." He recently made a rapid tour through the State of Florida meeting the officers of the Woman's Clubs who will sell Red Cross seals, interesting officers of the Red Cross in this branch of their national organizations' activities, presenting to County Superintendents of Public Instruction the desirability of introducing the "Modern Health Crusaders" movement into the schools, giving brief talks in high schools and churches, getting acquainted with editors of the local papers, learning about local health conditions from town and county health officers, advocating everywhere the necessity of county sanatoria and nurses, preparing material for this number of "Health Notes," and incidentally getting acquainted with the general health situation in the State. After this tour he returned to headquarters about November 15th, and took charge of sending out the supplies for the Red Cross seal campaign. Later on in the year he hopes to take a more leisurely tour of the State, lecturing in all the principal towns.

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### THE RED CROSS SEALS

Nearly every one in Florida, in fact in the whole United States, must by this time be acquainted with Red Cross seals. They are little stamps about the size of a postage stamp, which nearly everybody buys now and puts on Christmas letters and parcels. For the past three years they have borne a pictured head of Santa Claus. This year a new design has been evolved, a beautiful snow-covered Christmas tree. The Red Cross first undertook the sale of these seals in 1907, selling \$450,000 worth that year. In 1915 receipts were about \$750,000, and last year they exceeded a million dollars. That means that over a hundred million seals were sold in the United States, for each seal sells for one cent. In Florida in 1914, there were sold over 200,000 seals; in 1915 over 280,000 seals; in 1916 over 360,000 seals. But this has been only getting started. The aim of the Florida Anti-Tuberculosis Association is to sell three seals for each citizen of the State. In December there will



be about a million people in our State. This means we should sell 3,000,000 seals.

The money received from the seals will be used to take care of the soldier boys who develop tuberculosis; to start a campaign to get county sanatoria; to provide county nurses. If we sell three million seals we are only getting one cent from each person for the soldiers, one cent for sanatoria and one cent for nurses. Can we give less than this and maintain our own self-respect? The State of Wyoming sold over two and one-half seals per capita in 1916. With one-sixth of the population of Florida they sold more seals than we did. The National Anti-Tuberculosis Association is asking States and towns to try and sell six seals per capita and all States and towns doing so will be presented with a banner. The towns are divided into classes and the number sold per capita is the basis of award, so even the smallest communities have a chance. The banners won in the 1916 seal sale were as follows:

	Population			Pop.	Seals Sold per Capita
Class 1.....	300 to	600	Thornberg, Pa..	300	30.
Class 2.....	600 to	1,200	Hershey, Pa.....	837	78.
Class 3.....	1,200 to	2,000	River Falls, Wis..	1,980	15.
Class 4.....	2,000 to	8,000	Sewickley, Pa...	5,052	10.
Class 5.....	8,000 to	25,000	Morristown, N.Y.	13,111	10.
Class 6.....	25,000 to	50,000	Elmira, N.Y.....	40,790	7.6
Class 7.....	50,000 to	150,000	Troy, N.Y.....	75,209	6.3
Class 8.....	150,000 to	400,000	Rochester, N.Y...	254,873	4.1
Class 9.....	400,000 to	1,000,000	Buffalo, N.Y....	461,164	4.4
Class 10.....	1,000,000 and over		Brooklyn, N.Y..	2,213,257	2.3

The States were divided into three classes. In Class A, States having a population of less than 1,250,000, the winner was Wyoming, which sold 2.7 seals per inhabitant. Florida ranks eighteenth (next to the lowest in this class), with an average of .4 per capita, less than half a cent per person! In 1915 Florida ranked fourteenth. This year we expect our State to prove the dark horse which will push its way right to the front.

### UNNECESSARY FEAR OF THE TUBERCULOUS

Because tuberculosis is an infectious disease and is caught almost entirely by passing from one person to another through coughing, sneezing or expectoration, there has, up to the present time, been a very general policy amongst hospitals not to admit tuberculous cases. Yet the actual facts are that there is less danger in a ward full of tuberculous patients than there is in attending school, church or the moving picture house. In one institution in Denver which handled 19,000 cases of tuberculosis, *not one attendant ever contracted the disease.* In view of these facts, the Na-



tional Association for the Study and Prevention of Tuberculosis, at its annual convention in Washington, May, 1916, adopted the following resolution:

"Whereas, In the past the tendency of general hospitals has been to exclude cases of tuberculosis, and

"Whereas, It has been demonstrated in a number of such institutions that this class of cases may be admitted into separate wards without detriment to other patients, and

"Whereas, Both for humanitarian reasons and for purposes of instruction, [so nurses and young physicians may have experience in handling such cases], there is need for a change of policy in this regard, therefore be it

"Resolved, That the National Association for the Study and Prevention of Tuberculosis recommends to general hospitals through both their medical and lay boards, that separate wards, one for each sex, be established for the care of such cases."

## WHAT TO READ ON TUBERCULOSIS

Probably the best book on the Great White Plague both for the general public and those suffering with this disease is the book by Edward O. Otis, M.D., "Tuberculosis: Its Cause, Cure and Prevention." (326 pages, \$1.25). While Dr. Otis has designed his book primarily for laymen, it is the kind of standard treatise on tuberculosis that any physician may well keep on his shelves for reference.

The National Anti-Tuberculosis Association publishes a monthly bulletin which is sent freely to all who agree to read it regularly.

A much needed "Handbook on Tuberculosis for Medical Practitioners" has quite recently been published by the National Association to furnish physicians with the latest reliable information in a compact form.

The "Journal of the Outdoor Life," (289 Fourth Avenue, New York City, \$1.50 a year), is the monthly magazine especially devoted to Anti-Tuberculosis. It is a highly readable, illustrated journal, interesting and instructive, which physicians, health officers and intelligent tuberculous persons cannot afford not to read. It should be in every public library in Florida.

"What You Should Know About Tuberculosis; Useful Facts for the Tuberculous and Those Living with Them," is an excellent pamphlet prepared by the National Association for the Study and Prevention of Tuberculosis and printed for distribution by the State Board of Health of Florida, August, 1916. Send for a copy.

"Sleeping and Sitting in the Open Air," (10 cents) is a pamphlet of twenty-five pages, fully illustrated, which shows in detail how to erect and plan sleeping porches and window tents; the proper type of bed, chair and clothing, with a list of manufacturers of these goods.

All of these books may be obtained, at prices named, from the Florida Anti-Tuberculosis Association, Duval Theatre Arcade,

Jacksonville. Leaflets are distributed free of charge to persons or associations desiring them.

"T. B.; Playing the Lone Game Consumption," (25 cents), a small booklet of seventy-five pages by Thomas Crawford Galbreath, is a highly interesting story of the author's struggle for life. This book is especially valuable for those who do not appreciate the absolute necessity of rest for persons afflicted with tuberculosis, and for those who, when convalescing, too early attempt to get back into active life. Give it to friends or patients who need this caution.

In the last ten years the amount of money spent annually in the anti-tuberculosis campaign has increased from \$5,000,000 to \$22,500,000. No wonder the death rate in the United States has dropped one-quarter.

Tuberculosis Week will this year be celebrated December 2nd to 9th. Thursday, the 6th, will be Medical Examination Day, when every person will be urged to have a thorough examination by a competent physician.

Friday, December 7th, is "Modern Health Crusade Day," when a special program and health talk will be arranged in as many schools as will co-operate.

Sunday, December 9th, is "Tuberculosis Sunday." Clergymen of all denominations will be asked to preach a special sermon, or at least to devote part of their service to this topic.

The Southern Anti-Tuberculosis Conference met this year November 9th and 10th in Chattanooga. All physicians, public health officers and nurses, chairmen of Woman's Clubs and Health Committees and others who may be interested, are urged to attend. An excellent program of addresses has been planned.

The expenditures of the U. S. Agricultural Department in fighting hog cholera, hoof and mouth disease, and other animal diseases, have in the Sixty-first, Sixty-second and Sixty-third Congresses, amounted to over \$15,000,000. During this period the expenditures by the same three Congresses for public health was under \$3,000,000. Don't you wish you were a hog? Well, times are changing. Watch the next three Congresses.

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## THE DENTIST AND TUBERCULOSIS

The dentists of our State are recommended to make use of an article by David R. Lyman, M.D., (Wallingford, Conn.) on "The Teeth in Tuberculosis," which appears (pages 178-181) in the transactions of the National Anti-Tuberculosis Association for 1916. Dr. Lyman states that his experience leads him to believe that "at least a fair number of our persistent, slight temperatures are due to the complications in the mouth," and gives instances in which the cleaning up of a bad mouth in tuberculous cases had been followed by the reduction or disappearance of abnormal temperature. Furthermore, he emphasizes the obvious fact that "Good food is of little use unless it be made available by thorough digestion. Is

there anything quite so essential to this as good teeth, and is not this condition fully as important to us as that of any other portion of the alimentary tract?" He quotes Dr. Knopf as saying, "A well conducted sanatorium should not be without its dental chair." There is no doubt that annual, or better still, quarterly, examination and cleaning of teeth will reduce the amount of tuberculosis by materially aiding in keeping the constitution up to the necessary point of resistance.

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### INTERSTATE CONTROL OF TUBERCULOSIS

"The interstate tuberculosis problem has reached such proportions that its solution would have a pronounced effect in reducing the prevalence of tuberculosis throughout the United States," is the statement of Dr. Wilbur A. Sawyer, of Sacramento, Cal. Careful studies already have been made of this problem, especially as affecting the States of New Mexico, California, North and South Carolina, Arizona and Colorado.

The United States has recognized this danger in its Interstate Quarantine Regulations (Treasury Department, 1916, Sec. 1, 17, 22 and 28), which prescribe certain precautions which must be observed by common carriers transporting persons known to be tuberculous. The Kent bill, which failed of passage by Congress, provided federal assistance for State institutions taking cases from other States. The advantage of this plan would be that the government could require all institutions receiving aid to rise to a certain standard. The disadvantage of such a plan would be to cause vast numbers of the afflicted to flock to such States as Colorado, if they knew that government assistance would be forthcoming. It is estimated that from 10,000 to 15,000 consumptives migrate yearly in search of health. Those who have small financial resources would be much better off if they used what money they had for proper care at home. Proper food and rest are more important than climate.

Massachusetts has a mandatory tuberculosis dispensary law. Towns of 10,000 population and over must maintain a tuberculosis dispensary out of their own funds.

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A boiling temperature kills the tubercle bacillus in a few minutes, and boiling in water is one of the best ways to disinfect dishes, bedding and clothing. Carpets, rugs and clothing which would be injured by boiling, can be rendered quite safe by being hung in the sun for a day or two, provided that all parts of the fabric are exposed. Dust serves as an envelope to protect the bacillus from light, and so preserves it.—*U. S. Public Health Bulletin No. 36.*

## COLORED PHYSICIANS AND COLORED NURSES FOR COLORED PATIENTS

Until the war, consumption was a white man's disease in America. Moreover, in his original home the negro had been free from this disease. Consequently the negro race has not acquired that partial immunity which the white race, through generations of weeding out of the susceptible, has attained. In the United States the death rate of negroes from tuberculosis is three times that of the white race. The problem therefore of the negroes who go North, live for a time in the great cities where tuberculosis is widespread and bring back the infection to their former Southern homes, is very serious. "The great susceptibility to infection, the insanitary condition under which a large portion of the race lives, low wages, improvidence, and above all, the reluctance of the negro to seek medical advice, all point to the necessity of intensive educational work which must be more than ordinarily persistent."

The Phipps Institute, Philadelphia, sent out a nurse to make house to house visits amongst the colored residents nearby. Two more nurses were added later. Within one year it was found that whereas formerly few colored people came to the dispensary now there is an attendance each day that a clinic is held (twice weekly) of about a dozen, and the number is steadily increasing. This clinic has been put in charge of a colored doctor. Atlanta and Richmond employ colored nurses. Jacksonville employs four. Under the previous administration in Florida one of the State Health Nurses was a colored woman.

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## INSURANCE AND TUBERCULOSIS

That industrial insurance laws not only result in a great decrease in the number of accidents, but also are effective as stimulating Anti-Tuberculosis activities is the opinion of the Director of the Pension Board for the Hasa Cities who says, "The conviction may be expressed, after the experience of several years, that an effective battle against consumption among the working classes would have been all but impossible without the workmen's insurance. \* \* \* These laws have placed within the reach of the working classes resources of healing never dreamed of before."

Several of the large life insurance companies in the United States publish literature on public health, including pamphlets on tuberculosis. Some companies offer free medical examination and free nursing service to those who have insured with them. Some one has suggested that a life insurance agent be put on every Board of Health; it is to his interest to see that people live longer.

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Measles and whooping cough in children are especially liable to be followed by consumption. Mouth breathing should be corrected and adenoids removed.



## FAKE CONSUMPTION "CURES"

[Points gleaned from a pamphlet by Philip P. Jacobs, Ph. D.]

More than 500 different varieties of so-called "cures" for tuberculosis are now being sold to the American people at a cost of \$15,000,000 annually. If this same amount were spent on good food, nursing and care by a physician, hundreds of lives would be saved each year, for *you cannot buy from any druggist in the United States a medicine or mixture that will cure tuberculosis*, in spite of the seemingly substantiated claims of druggists and manufacturers. Relying on assertions of the sellers of these so-called "cures" the consumptive often loses weeks and months of valuable time before he consults a doctor; valuable because if this dread disease is properly cared for in its incipency three out of four persons infected may be cured; if one resorts to drugging himself until the disease has gotten a good hold of him, he has barely a fourth of a chance to pull through.

That many of the testimonials of drug vendors, which state that certain individuals have been helped by their nostrum, are truthful in the sense of being written by persons who believe themselves to be benefited by the use of a certain "remedy," gives the salesman his direful advantage. But it is a matter of scientific record that if you inject a little warm water, milk or any other harmless fluid into a tuberculous patient and tell him in advance that it has curative properties, he will in most cases show a ready response to the suggestion and will feel relieved from certain distressing systems in a very short time. In many nostrums, the symptoms are temporarily deadened by some powerful opiate or stimulant which is an ingredient of the "remedy." As soon as the effect of these powerful drugs wears off the patient is worse than he was before.

Dr. Jacobs publishes a number of photographs of testimonials from persons who stated they were helped or cured by various fake consumption cures, accompanying these by photographs of the death records of these same persons.

The American Medical Association, 535 Dearborn Avenue, Chicago, will gladly tell you, if you will send them a sample or write to them about any so-called "cure," what its real merits may be.

The only real cure for consumption is the well-known combination of fresh air, rest, wholesome food and freedom from worry, all in large doses, and under competent medical direction.

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Anti-tuberculosis workers and temperance advocates should work hand-in-hand, for alcohol especially predisposes the user to pulmonary disease. Moreover, an alcoholic has not half the chance of recovery that a non-user has. Another good reason why alcoholism should be wiped out.



## THE TUBERCULOSIS WAR PROBLEM OF UNITED STATES

The present great war has shown tuberculosis to be one of the worst enemies of armies and the control of tuberculosis is one of the most important steps in protecting the resources of the nation. France has sent 200,000 soldiers back home from the trenches with tuberculosis and has thus also spread the disease amongst her own people until the country has become terribly scourged with this fearful plague. It is like letting the enemy in through a back door. We must profit by the sufferings of others and prevent such a catastrophe to our soldier boys and ourselves.

Germany, on the other hand, by being prepared to care for her soldiers who became infected, has returned over one-fifth to field work; one-sixth to garrison duty to be soon followed by field duty; over one-half to garrison duty; while less than four per cent. have become unfit for any service. This shows the difference between preparedness and waiting until the mischief is done. Consequently, the National Red Cross has asked that part of the money obtained by the sale of Red Cross seals be this year used to care for our soldiers both abroad and in this country, both as a duty to them and as a protection to their loved ones at home. Florida must bear her share of this burden.

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### HOW SHALL WE FIGHT CONSUMPTION IN FLORIDA?

In order that the Florida Anti-Tuberculosis Association may obtain the benefit of the advice and experience of the readers of the "Health Notes," the following queries are submitted with the earnest request that every one who is interested in assisting in wiping out tuberculosis will send answers to the executive secretary, Dr. John B. Leeds, Duval Theatre Arcade, Jacksonville, Florida:

1. Do you favor the establishment of county sanatoria under a plan of grouping several counties together?

If so, will you give time, money or the use of your name to support a campaign for the election to vote for the necessary funds?

2. Do you favor the employment of a public health nurse in every county?

Should she be paid from public funds, private funds, or a combination of both? How can these funds be obtained?

3. Do you favor a full time Health Officer in each county? What salary should he receive? How can well qualified physicians be obtained for such offices?

4. What other means of combatting tuberculosis than those suggested above do you consider desirable?

If the State Secretary of the Florida Anti-Tuberculosis Association makes a State tour, will you give time or your name to assist in getting up public meetings?

What methods have proven successful in arousing general interest in public questions in your community?

## "MODERN HEALTH CRUSADERS"

Since we have learned that much of the tuberculosis which terminates with death in middle age has been contracted in childhood there is added incentive to give the children thorough education in hygiene and sanitation.

The process of education is not complete, however, when facts have been presented to the child's mind. Health activities must become habits. In order to induce school children to acquire these habits the Anti-Tuberculosis Association offers to co-operate with the public schools through the "Modern Health Crusaders" plan. Dr. Leeds, on his present State tour, is presenting this idea to the County Superintendents of Public Instruction and every one to whom it has been explained has agreed to have it tried out. Teachers will be supplied with a chart containing eight desirable health activities, such as cleaning teeth, playing in the open air, etc. Spaces are provided for checking off daily for a week (or for a month, if desired) whether the child is keeping up each requirement. The record is to be kept by the parent. This, therefore, tends to interest the parent in the health habits of the child. In order to stimulate the child to do its best, beautiful pins are offered as rewards.

There are also a series of health plays which will be supplied to any teachers who may wish to use them in either public or private schools.

In order to make the little folks appreciate the importance of good health habits it is suggested that when the pins are to be presented the parents be invited to be present and a health play be given to entertain them.

One hundred thousand school children throughout the United States are already enrolled as "Modern Health Crusaders."

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## AN ANTI-TUBERCULOSIS CAMPAIGN IN FLORIDA IN 1918

If every one was profoundly interested in things which concern his or her best welfare, Public Health talks would be given to packed houses.

If tuberculosis was a disease of epidemic nature instead of being endemic; if this Great White Plague swept through a community carrying off in a few days or weeks the number who die annually, as does smallpox and yellow fever, instead of unobtrusively taking one here and another there, we would rise up in wrath and wipe it off the face of the earth.

But as people prefer amusement to self culture and seek salvation only when terrified, as by war or pestilence, the problem of inducing the majority of folks to attend lectures on Anti-Tuberculosis is a difficult one.

The Executive Secretary of the Florida Anti-Tuberculosis Association submitted to the meeting of the directors in Tampa last

month a plan for a tour of the State early in 1918, following out some such plan as the following:

Lease the largest moving picture theatre in each town having one, and offer a program lasting from 3:30 to 5:30. Use one or two of the anti-tuberculosis films prepared by the National Association; possibly use portions of the delightfully comic "Down to Earth," by Douglas Fairbanks, which teaches a good health lesson; have a group of children give one or more of the health plays; presentation of gold pins won by "Modern Health Crusaders"; half hour address; half hour talk illustrated with lantern slides.

In the evening have a union meeting in the largest negro church in the town.

The next morning at 10 o'clock have a conference of the county commissioners, town officials, board of education and town and county superintendents of public instruction, town and county health boards and officers, officers of Woman's Clubs, Red Cross and other local organizations and interested citizens, to determine what each community should do in the direction of providing institutional care, nursing, medical attendance and necessary food for its tubercular citizens, with the aim of eventually wiping out this disease and keeping the community protected from future infection.

Suggestions regarding such a program are earnestly solicited by the Executive Secretary.

Climate is one of the State assets which Floridians especially emphasize. The following paragraph from "The Relation of Climate to the Treatment of Pulmonary Tuberculosis" by F. C. Smith, surgeon U. S. Health Service (P. H. Bulletin No. 35), will be of interest: "As typical of the warm, humid, equable climate should be mentioned Hawaii, certain parts of Florida, and the coast of Southern California, and as winter resorts and for those with nephritis and advanced fibroid changes, as well as for the aged and cases complicated with excessive bronchial irritability, this type of climate is useful."

Antiseptics placed in basins in the room of a tuberculous patient are useless. No antiseptic solution sprinkled or mopped on floors, walls or furniture is of any use unless the dirt has been previously removed to allow the fluid access to the objects. Soap and water for floors and a wet cloth with which to wipe furniture are the best agents to combat infection.

Certain persons have believed in the antiseptic powers of smoke. So far as tuberculosis is concerned it certainly has no beneficial effect, while the inhaled smoke of cigarettes is especially harmful to the delicate air passages.

## DOCTOR VS. NURSE OR DOCTOR AND NURSE

Not a few still seem possessed of the idea that in tuberculosis work the physician and the "public health nurse" (as she is fast coming to be called) are at opposite ends in human service, and working against each other. This fallacy is due to a distinct misunderstanding of the function of the public health nurse, also of the real purpose underlying the practice of the truly modern doctor.

The function of this nurse is to discover incipient disease; to investigate conditions likely to superinduce disease; to educate in the causes of disease, and in the elements which predispose to health; to get to the doctor all suspected cases for proper examination, diagnosis, treatment, as well as to bring under his immediate care such cases as need attention, even when she has to persuade the patient to do what he would not do voluntarily till too late for the doctor to be of any real service.

The doctor *has* stood simply for *cure*. In this day of hospitals when it is possible, any special case is sent to some institution. Institutional care is unquestionably better than it is possible to secure at home, with perhaps any disease. Naturally the doctor wants his patient for treatment under the best possible conditions, such as a hospital may furnish.

In the fight against tuberculosis the best most doctors can do is to try to cure patients who come to them most frequently in the last, or at least well-advanced, stages of the disease if they come voluntarily. Naturally the doctor *wants to cure this case*. Time and effort are both limited. There is no certainty this or that patient will carry out his instructions, however insistent he may be. The *best* thing is the sanatorium. The doctor finally gets him there. Can he go to the family and tell them he plans to call at least once a week for the next few months to watch the other members to discover *possible* symptoms of the same trouble? Not until so called. His particular duty ends with the cure, or proper placing for possible cure, of one patient seeking help. But there is some likelihood that one or more of the remaining members of that family will soon seek him with the same story told by the former patient. This is entirely unnecessary and generally avoidable.

Should the patient refuse, or be unable, to go to the sanatorium some one must stand ready to interpret the doctor's instructions; some one must instruct and demonstrate in proper care of the patient for possible cure, and especially to prevent the spread of the disease to family and neighbors. The nurse is specially trained to do this. So she also has follow up work as an aid to the doctor.

Thus we see that the physician and the nurse are most surely tied together, especially in the anti-tuberculosis campaign. While the doctor works to cure, so does the nurse. On the other hand, the nurse, as the discoverer of cases and suspects, gets them to the doctor that he may help prevent the development of the possible into a true case, while she is instructing the family in precautionary methods. Tied together by the work, they work together, each the



complement of the other, and through "team work" attain ultimate "success" in one of the greatest of all modern practices—*preventive medicine*.—*Bulletin, Maine Anti-Tuberculosis Association*.

## COUNTY SANATORIA

When New York State was in the throes of the battle with bal-lots (1915) over the question of County Sanatoria, Surgeon General William C. Gorgas, "the man who cleaned up Havana and made the Panama Canal possible," the foremost sanitarian in this country, and probably the foremost in the world gave his opinion in no uncertain words:

"In spite of all the work that has been done for the prevention of tuberculosis, that problem remains the largest and most important public health problem today. Tuberculosis is like our yellow fever campaigns in Havana and the Isthmus of Panama. In Havana and Panama we employed many measures, any one of which, probably, if it had been completely carried out, would have succeeded in controlling yellow fever. We know that no one of them, however, could be carried out with complete efficiency. We therefore employed all measures that promised success as extensively as we could.

"HOSPITAL CARE FOR THE SUFFERER FROM TUBERCULOSIS, IF EVERY PATIENT COULD BE PLACED IN A HOSPITAL, WOULD UNDOUBTEDLY STAMP OUT THE DISEASE IN A FEW YEARS.

"There was probably as large a percentage of the population of England afflicted by leprosy in the fifteenth century as are afflicted today by tuberculosis. County hospitals for leprosy stamped out that disease in England. Your plan of county hospitals in New York State will do the same for tuberculosis in this commonwealth—and when they are established in sufficient numbers and are sufficiently effective to segregate all cases in the infective stage."—*Bulletin, Maine Anti-Tuberculosis Association*.

There are now in the United States 550 sanatoria, hospitals and day camps with approximately 35,000 beds devoted to tuberculosis patients. Florida with one hundredth of the country's population should have 350 beds if up to the average standard. If we include every known public and private institution the total is today probably just about one-third of this.

The law passed in the last session of our Legislature, largely through the persistence of the secretary of the Associated Charities of Jacksonville, provides that whenever 25 per cent. of the voters of any county by petition shall call for an election such election must be held and if a majority of the votes cast are favorable then a half



mill tax shall be levied and a sanatorium erected and equipped. With the present development of our State it would be an unnecessary burden to have every county erect such an institution so the law specifically provides that several counties can be grouped together and an institution erected in one of the counties, to which the other counties may send patients and pay pro rata for their care.

The Florida Anti-Tuberculosis Association is considering making an active campaign to carry this law into effect.

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## WHERE IGNORANCE IS DEATH

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BY ALICE MAJOR EDWARDS, Monrovia, Cal.

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He was only a plain middle-aged machinist who had done his day's work with hearty thankfulness that there was work to do. Plenty to eat of a sort, school books for the kiddie, and the rent paid every month. He and the woman had managed that.

One day he began to cough. The atmosphere was heavy in the shop—yes, one easily caught cold, and too easily kept it. So he coughed, all winter, all spring, and—it had never hung on quite so long before—all summer and all winter again.

Then he noticed he was not working with his old vigor. Coughing tired him. It was becoming too much trouble to eat. He would come home, fling himself upon the couch and fall into a numbing sort of slumber, only to be wakened by the cough which shook him ever more harshly. Still, a man does not go to a doctor when a call means two days' wages, or a day off from the chief business of life. Instead, he coughs on. For four years John Jones coughed on, lost flesh, and worked without ambition and with ever-increasing weariness. Then the drop came.

The physician looked at him sharply. He knew what the short breath, feverish lips, abnormally bright eye and that incessant cough meant. There was the formal examination, of course, the weary man's bewilderment growing with each new test; then—

"Consumption, man!"

The doctor did not hesitate to use the old-fashioned term for the disease now known under a more euphonious title.

"Quit work at once. Go to Arizona and live in the open air—your only chance. People get well there."

And he bowed the stricken man out with a throb of pity for the twitching lips and anguished eyes.

John Jones was not one to think or act quickly. It had become easier to do things slowly in the past few years. And he was tired—very tired. He found it hard to board the car. He scarcely

noticed when the conductor roughly urged him to hurry as he hesitated with a foot on the running board.

Consumption! That was what the doctor had said of Brown who had worked next to him for years, and who died there in the shop of sudden hemorrhage one day only a few months since.

Quit work! Why, he'd worked every day, always—Sundays, too, most of the time—a full, clean day's work. A man might be tired; he might cough, but he must work and work hard when there were Mary and the growing kid. Quit work! Who paid the bills when a man quit work?

Arizona—where was that? He had heard of it as he had heard of Patagonia or Siberia or the Klondike. He must go, of course, if the doctor said, for the doctor knew. People got well there, and he must get well. The fight was hard enough when a man was strong. How did one get to Arizona? How—

He ran across Casey. Casey was fat and red of face and had all the insolence of health.

"Hard luck, old man!" His hearty slap upon the thin shoulders made his companion wince, but Casey did not see that. "Got to go, have you? We'll see if the bunch can help a little. Don't get fussy." And Casey was off.

The "bunch" helped; the boss and the boys at the shop helped. They had been glad to give but they had not much to spare; and it was with no little pride that they collected just exactly seventy-five dollars.

Mary could sew enough afterwards, she said; he was not to worry.

And now he was in the day coach for his four-day trip, his lunch in a big basket. One could not afford a sleeper when tickets cost so much.

He had not known before how desperately weary he was. It was hard to breathe with the motion of the train which shook the piteously thin shoulders. The coal dust made one cough harder, too. To eat was an effort—why eat, when a man was so tired.

Hunched into a corner of the seat he sat, a pitiful, broken-chested, shivering creature, hot fever touching his cheeks with livid color. He had tried to eat one of the sausage sandwiches which Mary had so carefully packed in with the cheese and doughnuts. Soiled handkerchiefs and cloths lay about on the floor and in the rough plush seat, laden with death-dealing germs for the next occupant. John Jones was not uncleanly. But when one coughed so hard and so long, it was not always easy to be careful. The porter would not bother. John learned that when he called to him one morning, dizzy with that dreadful nausea from the car motion. "The company didn't have anything to do with 'lungers'; there ought to be a law to prevent their riding at all."

If only he dared ask for a drink now. Perhaps he could reach the cup himself. It was hard to move, harder still to stagger up the lurching aisle. But the water, drunk in gulps of thirsty grati-

tude from the common cup, was most refreshing. Of germs he had not heard. Of infection he did not dream. The doctor had not said.

He pulled himself back to the seat and settled down again into his corner, shaking and spent with the effort.

It was there I found him as I was passing through from the Pullman. He seemed grateful that anyone should be inclined to chat with him. It was lonesome, he said, and he was tired. He talked of Mary and the kiddie and of some of the things he hoped to do for them when he was well—in Arizona. He would get some light job right away, then Mary need not work so hard. He would be rested after he got off the train. People always got well there.

His hungry look as we passed the depot lunch house at a little station sent me out to get a cup of coffee for him. I came back to find a hushed compartment, a negro porter gray with superstitious terror, a shriveled inert heap where John Jones had lately sat.

And at home Mary was sitting half-heartedly picking at a bit of unfinished sewing, waiting to hear of a safe arrival. Loneliness had grown less endurable with every hour. Anxiety had made the days a dragging suspense, nights a prolonged terror. It had been hard to let him go. But the doctor had said—

What was it the doctor had said?

The doctor had said just enough to send a man (with the sentence of immediate death upon him) a torturing journey of two thousand miles away from such friends and comforts as he possessed. He had gone with no knowledge of the disease he was combating, no resources for caring for himself in a strange country, no thought of the precautions necessary to public safety.

Three sufferers from the effects of John Jones' wretched and ill-advised journey—John, Mary, the public. But how are John and Mary and the public to know better?—*Journal of Out Door Life.*

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The dry sweeping of rooms, especially school rooms, should never be allowed, as it raises clouds of dust, which may contain germs, which are thus breathed directly into the lungs. All broom sweeping should be preceded by strewing the floor with damp sawdust, old tea leaves or bits of wet paper, or something similar.

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Do not move into any room, house or work place formerly occupied by a consumptive until such place has been thoroughly disinfected by the Board of Health or your doctor. Housekeepers can give thorough scrubbing with hot carbolized soap suds and water, followed by exposure to fresh air and sunlight. This had better be done under the direction of a physician or nurse.

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Do not allow any one to kiss you on the mouth. If you do, you will surely die some day!

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Night air is not harmful; it is good for consumptives.



## Important Notice to Physicians Sending Specimens to the Laboratories

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Your attention is called to the fact that many reports on specimens for diagnosis are delayed, due to the fact that the specimens are not fully prepaid. The delay frequently postpones the report twenty-four hours and during the past week in three instances the delay was over forty-eight hours, due to the fact that they were held at the postoffice and no notice sent, though each was stamped with the date of receipt at Jacksonville.

*If each physician will be sure that every specimen he sends is fully prepaid it will assist us to give prompt reports. Please help us to do this.*

# Reporting Notifiable Diseases

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## TUBERCULOSIS

When reporting a case of tuberculosis, be sure to state the organ or part affected by the disease; that is, pulmonary tuberculosis, acute miliary tuberculosis, tuberculous meningitis, tuberculosis of spine, etc.

## DYSENTERY

Do not report as dysentery the ordinary diarrhoeas. The term "Dysentery" is made notifiable only for amoebic and bacillary. Be sure to state whether amoebic or bacillary.

## CANCER

When reporting a case of cancer always state the organ or part affected by the cancer. The term "Cancer" as used in the rules and regulations governing morbidity reports includes all malignant growths and should be stated in the following manner: Cancer of tongue, cancer of breast, cancer of uterus, cancer of stomach, cancer of rectum, etc.

## MORBIDITY REPORT CARDS

The attention of those who have been supplied with morbidity report cards (Form V. S. No. 124) for reporting notifiable diseases to the State Board of Health is directed to the black-faced figures in the lower left-hand corner on the report side of each card. Each set of cards are numbered from 1 to 10, and it is earnestly requested that these cards be used in their numerical order, beginning with card No. 1, No. 2, No. 3, etc. If the cards are received in this manner, it will be possible for the State Board of Health to know the exact number of cards in the hands of each person required to make these reports, and when card No. 7 is received at this office, another set will be mailed immediately. This will make it possible for every person to be supplied with these cards without the trouble and expense of asking for them. Compliance with this request will be very much appreciated and will greatly facilitate the work of the State Board of Health.



# NOTICE

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## Concerning the Reporting of Notifiable Diseases

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Attention is hereby called to the fact that only eight (8) of the thirty-eight (38) diseases which are made notifiable to the State Board of Health are required to be reported by wire. Those required to be reported by wire are as follows:

*Asiatic Cholera*  
*Bubonic Plague*  
*Yellow Fever*

The State Board of Health will not accept telegraphic reports of any cases other than those named above.

When reporting any of the cases which are required to be reported by wire, it is necessary to follow the wire report with a report on card (Form V. S. No. 124), giving all of the information required thereon.

HUMAN LIFE IS THE STATE'S GREATEST ASSET

# FLORIDA HEALTH NOTES



## OFFICIAL BULLETIN PUBLISHED MONTHLY BY THE STATE BOARD OF HEALTH

EDITED BY DR. W. H. COX, STATE HEALTH OFFICER

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### Manual for Medical Inspection of Schools

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To me, the tragedy of this earth is the diseased child. The natural inheritance of a child is joy and strength and growth and freedom. He is robbed of it all by disease. To me, the most tragic indictment of civilization is a diseased child—civilization that stands still and lets a little child, through ignorance of his parent or his teacher or for any cause, be robbed of this divine inheritance of the joy and happiness of childhood—of the strength and growth of childhood! Medical inspection is intended to help prevent that tragedy—to help remove that terrible indictment against our Christian civilization. The physician and the teacher are necessarily the main agencies in this work. Medical inspection, then, opens a new door of larger service to childhood, and through childhood, to civilization and posterity.—Dr. J. Y. Joyner, in address before State Medical Inspectors, Raleigh, October 11, 1917.

# FLORIDA HEALTH NOTES

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## NOTE

There was no edition of the Florida Health Notes issued for the month of December, 1917. The regular Serial Number, however, has been preserved in the January issue (November, No. 9, January, No. 10), and the paging is continuous from the November issue.

EDITOR FLORIDA HEALTH NOTES.

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## Medical Inspection of School Children

The demand for conservation has become universal. On every side one hears the admonition to save, to substitute, to eliminate all waste in order that the sinews of our fighting machine may be strengthened and maintained. The struggle over the sea for the perpetuation of the principles of democracy and the survival of our institutions of liberty, has brought about a serious accounting in the affairs of life that is going to be of everlasting benefit.

War in an economic sense is a loss. Its achievements are expressed in terms of destruction and devastation. The support of a large army is a burden which extends to even the most remote citizen. Those responsible for the organized efforts for conservation, which spend their energy solely in a determination to effect a greater saving and distribution of those fuels, foods and materials essential to the successful conduct of the battle against autocracy and neglect the enormous wastage of vital assets which are assembled in the school rooms today upon whom the responsibilities of the country will soon rest, are making a serious mistake.

Japan realized thirty years ago that the health of her people was the main asset of the nation and that her ability to maintain her position among warring countries rested solely in the physical strength of her subjects. Consequently she set about to conserve, strengthen and build up her fighting resources in every way possible and one of her first acts of preparedness for the bloody struggle, which was to be staged some years later was, the inauguration of a complete system for the medical inspection of school children. It may be perhaps that some shrewd observer while studying her school system noticed "that a defective or feeble minded child in the second grade was an indifferent pupil, but when in the fourth grade such a child became a mere lodger," and realizing that in an attempt to school an individual of that type the country was wasting its funds and the teacher her efforts, and in addition, the education of others was retarded; then the awakened authorities set themselves to the elimination of this waste and the reclamation of this element of defective youthful humanity. How well she succeeded is known to every one for since that time her history has been a history of progress.

Our own country, while active in a great many ways that make for health betterment, has never undertaken a general crusade for the examination of school children. Numbers of States, however, since the Connecticut law of 1899, have been passing laws making this great work mandatory and gradually the idea of medical examination of all school children is "developing into a fixed principle of medical economics and preventive hygiene."

Recently the results of our sins of omission were presented to

the nation at large in rather a striking manner. In the examination of men for the new National Army, our attention was attracted to some rather surprising facts.

"A very large number of men are physically unfit for service. The physical defects discovered by the examining physicians were in many instances unknown to the men themselves, or if known, considered of no importance. A large proportion of the physical defects could have been prevented, or cured, if discovered earlier."

If this examination could have included the rest of the population it would have shown that this is true of the entire United State, and that we had accumulated a waste of vital resources, at one time remediable, that is beyond comprehension.

The Legislature of Florida, in 1915, passed a law for the Medical Inspection of School Children. The statute as has often been expressed, is a very much mutilated enactment. It requires that the inspection shall be conducted by the County Physician, assisted by other medical men, one for every twenty-five hundred children, to be appointed by the County Commissioners. Upon the State Board of Health is imposed the duty of "supervising all matters pertaining to the inspection, such as the formulation and adoption of such rules and regulations as are found necessary for the successful conduct of the work." It further specifies that "one examination shall be made of school children as to their physical condition at least once during each school year," and that the accounts necessary to carry out the provisions of the law shall be paid out of the funds of the State Board of Health.

In short, it would require an inspecting force of the modest number of about ninety-five and an expenditure of a sum around eighty-five thousand dollars to examine the two hundred and forty thousand school children of Florida in the manner contemplated in the law, an undertaking far beyond the available resources that could be devoted to the work. After some discussion of the weakness of the measure and its impossible provisions, it was decided by the Board to carry out, as far as they were able, the expressed wish of the people through the Acts of the Legislature. Accordingly a plan was worked out which took into account the limited number of District Health Officers, the large number of schools and the time that could be devoted to the work. With the co-operation of the school authorities and the teacher especially to act as an assistant in each room examined in listing the defects found, making such part of the examination as she could familiarize herself with and carrying the information into the homes with advice and insistence that the child affected be taken to the family physician for diagnosis and treatment in order that the defects might not become permanent obstacles to physical and mental growth, it was thought that something could be accomplished. With this in mind the plan contemplates:



1. The detection of such conditions as defective vision, impaired hearing, sore eyes, enlarged tonsils, adenoids, decayed teeth, hookworm, etc.

2. The inauguration of a follow up service by the teacher among the parents of those affected in order to secure the correction of the defective conditions observed at the earliest possible moment.

3. The exclusion from school of those suffering from communicable diseases or conditions as a means of preventing the spread of these troubles and the keeping up of a high average attendance.

4. In addition to the regular study of hygiene and sanitation among the different grades, talks from the District Health Officers to the children on the necessity for personal cleanliness, such as the thorough washing of the hands and the cleaning of the nails before eating; the use of individual drinking cups, towels, clean basins or running water, etc.

5. An inspection of the school building and its environs for the purpose of securing better hygienic conditions, such as proper ventilation, good light, a safe water supply and a sanitary method of sewage disposal.

It is the intention to study and remove, as far as may be possible, those conditions in a child's school life which tend to retard the growth of a strong mind in a strong body and to prevent their reaching the full estate of young manhood and young womanhood.

While the system which has been adopted is not as thorough and by no means as exhaustive as that employed in many States, still it is a practicable one and one that calls for an investigation for all the more common abnormalities of child life in Florida. It is all that the Board, under present conditions, can offer.

The system is as follows:

# Florida State Board of Health

## Medical Inspection of School Children

Name of School.....

County..... City, Town or.....

Voting Precinct.....

(Strike out words not applying)

If Rural School distance from..... Distance from.....

nearest incorporated Town or City..... nearest Railroad Point.....

Name of Pupil..... Name of Parent.....

or Guardian.....

P. O. Address..... P. O. Address.....

R. F. D..... R. F. D.....

Color..... Age..... Sex..... Grade.....

(white or negro)

Is the child making the progress that it should with its studies.....

**1—INSPECTION**

Height apparently normal for age.....

Weight apparently normal for age.....

Pallor.....

Undernourished.....

Enlarged glands of neck.....

Suspected of having hookworm.....

Is there any skin disease.....

Deformity..... What.....

**4—MOUTH AND THROAT****(a) Teeth**

Are they dirty.....

Are they decayed.....

Number decayed.....

Gums diseased.....

Does pupil use tooth brush.....

**(b) Tonsils**

Enlarged.....

(Slightly, moderately, greatly)

Body lice.....Head lice.....  
Any nervous disease.....

**2—EYES**

Is vision normal  
right eye.....left eye.....  
Are the eyes diseased.....  
Are the lids diseased.....  
Is trachoma suspected.....  
Is there a discharge from the eyes.....

**3—EARS**

Is there a discharge from the ears.....  
Hearing normal  
right ear.....left ear.....

Acute inflammation.....  
(c) **Deformity**  
Harelip.....  
Cleft palate.....

**5—NOSE**

Discharge.....  
Mouth breathing practiced.....  
Any obstruction to nasal breathing.....  
Adenoids suspected.....

**6—CLEANLINESS**

Usual condition of child.....  
(Cleanly, moderately cleanly, dirty)

**7—TUBERCULOSIS**

Apparent evidence in child.....  
Known to exist in family.....

Has any of the epidemic diseases prevailed in the school district during the present school year? \*.....

Name the disease or diseases.....

Following this examination has the child been excluded from school ..... Reason for excluding the child.....  
Have parents or guardian been personally advised of the defects or conditions requiring attention and urged to have them treated or corrected .....  
Have the defects or conditions been corrected .....or have you been assured that defects or conditions will be corrected.....

Date of examination.....191.....

(Signature of Teacher)

District Health Officer or Nurse  
conducting the examination.....

(Signature)

\*Typhoid Fever, Smallpox, Measles, Scarlet Fever, Whooping Cough, Diphtheria, Dysentery, Mumps, Yellow Fever, German Measles, Chickenpox, Epidemic Cerebrospinal Meningitis, Infantile Paralysis.

## INSTRUCTIONS TO DISTRICT HEALTH OFFICERS, NURSES AND TEACHERS

It is requested that District Health Officers, nurses and teachers read over the inspection blank and these instruction carefully before engaging in the examination. It is obvious that to make this work a success, it will be necessary to have the cordial co-operation and enthusiastic support of every one upon whom a responsibility rests for the carrying out of any of the different details of the system adopted. It is essential also, that the inspection be conducted according to the standard adopted.

An examination should be made of every child and each question answered as indicated. The District Health Officer should first confer with the County Superintendents and the school authorities, and secure their endorsement and co-operation in the work he is about to undertake. On visiting the school, the teachers should be called together, the blanks and all instructions gone over with them. It will be helpful to conduct a few examinations in their presence in order that they better understand the requirements of the system and have an opportunity to ask questions about any point that is not sufficiently clear.

The teacher should fill out the first and the last part of the blank and make as much of the examination of the child as she can. With the instruction given by the District Health Officer and that which will be outlined in this manual, she ought to be able to complete the entire examinations with the possible exception of diseases of the eye and diseases of the eye lids. On the second visit of the District Health Officer he can complete the unfinished part of the examination. He may find it, in the case of isolated schools, advantageous to complete the examination during his first visit.

At the end of each week the District Health Officer will furnish the Executive Office with a list of the schools, name of the teacher (her P. O. address) and the number (not names) of the pupils examined in each room for use in checking up unreturned blanks.

When the examination has been completed all blanks should be turned over to the teacher. After seeing the parents of each child in whom defects have been found and insisting that it be carried to the family medical man for diagnosis and treatment; noting the result of her efforts in this line on the blank, she will enclose all blanks in the special large stamped envelope supplied, and mail them to the Executive Office of the State Board of Health at Jacksonville, Fla.

It will also be advisable for the teacher to bear in mind that defects will doubtless be found in some who are indigent and their parents consequently unable to take them to physicians for treatment unless some outside assistance is offered. In almost every community there are doctors, often City Health Officer or County

Physicians, who will contribute their services, if an arrangement can be made for the furnishing by some individual or organization the medicines or whatever supplies may be necessary for the treatment. Cases of this kind should be listed and the memoranda turned over to some aid society or auxiliary charitable organization. Our efforts should not be confined to the detection of defects alone. *The follow up work is the most important part of the inspection campaign and upon it almost alone, the success of the plan adopted depends.*

The supplies furnished each District Health Officer are:

Snellin's Test Cards.  
Wood Tongue Depressors.  
Information Circulars.  
Rural School Sanitation Circulars.  
Inspection Blanks.  
Large Stamped Envelopes.

All necessary information has been included in this issue of Health Notes, which we will call the School Inspection Manual.

### SPECIAL INSTRUCTIONS FOR TEACHERS

Age	Sex	Weight (lbs.)	Height (ins.)	Age	Sex	Weight (lbs.)	Height (ins.)
6 yrs.—	Boy .....	45.1	44.1	12 yrs.—	Boy .....	79.8	59.8
	Girl .....	43.8	43.6		Girl .....	81.4	57.1
7 yrs.—	Boy .....	49.5	46.2	13 yrs.—	Boy .....	88.3	58.2
	Girl .....	48.0	45.9		Girl .....	91.2	58.7
8 yrs.—	Boy .....	54.5	48.2	14 yrs.—	Boy .....	99.3	61.0
	Girl .....	52.9	42.0		Girl .....	100.3	60.3
9 yrs.—	Boy .....	60.0	50.1	15 yrs.—	Boy .....	110.8	63.0
	Girl .....	57.5	49.6		Girl .....	103.4	61.4
10 yrs.—	Boy .....	66.6	52.2	16 yrs.—	Boy .....	123.7	65.6
	Girl .....	54.1	51.8		Girl .....	113.0	61.7
11 yrs.—	Boy .....	72.4	54.0				
	Girl .....	70.3	53.8				

In answering the first two questions under inspection the above table taken from Holt's Diseases of Infancy and Childhood, will be of service in giving an idea of the average height and weight for the different ages. It is not expected that you will weigh and measure the children.

### PALLOR

Note whether the pupil's complexion varies in any degree from the normal tint of a healthy child. Information can be gotten by observing skin color. Appearance of inner surface of eye lids, lining membranes of mouth, and lobes of the ears. Even a slight paleness should be noted.



### UNDERNOURISHED

This is evidenced by undersize and underweight, poor muscular developments, history that child is not active in play or exercise and is an easy victim of prevalent communicable disease.

### ENLARGED GLANDS OF NECK

By this is meant the nodules or lumps under the skin, which can be felt by running the hands over the neck and behind the ears.

### HOOKWORM DISEASE

It would be a good idea to secure specimens of feces from suspected cases and have them examined microscopically, as the infection will only in this way be found in many who show no signs nor give any history which is any way suspicious except, possibly an account of an early attack of ground itch. Pupils showing any grade of pallor, inclined to inactivity, slow in perception, slight loss of memory, undersized or undeveloped, absence of normal subcutaneous fat as is seen in prominent collar bones, vertebral spines and shoulder blades should be examined for hookworm. Many cases will be found in which there is only a slight disturbance, and in which the infection will be suspected only after a careful questioning. Full accounts of hookworm will be found in the publications of the Board.

### SKIN DISEASE

Examine face, hands and scalp. Apart from those eruptions which are among the communicable diseases of childhood, it is well to notice for the following highly infectious ones, scabies or itch; tinea or ringworm; favus, a ringworm-like disease causing eruptions on body and bald places on the scalp, and impetigo contagioso, an acute inflammatory disease appearing in separate patches or blisters, pustules, and crusts shown on the face. Examine carefully children, giving a history of scratching, or that show the marks of mechanical irritation about the face and hands. Blotches, bumps, blisters, sores and ulcers should be noted that appear to be of an infectious and systemic origin.

### DEFORMITY

By this is meant such orthopedic defects as hip deformity, wry neck, knock knees, inversion of knees, club feet, flat feet and the different curvatures of the spine.

### NERVOUS DISEASE

St. Vitus dance (chorea), convulsions (epilepsy) are the two main conditions to be noted.

## VISION

A large percentage of the eye defects may be discovered by inspection and another large part of them may be suspected from the report of the teacher. It is often related that the pupil cannot read writing on the black board, that he holds his book nearer to his eyes than thirteen inches, that his eyes are inflamed or perhaps he blinks his eyelids and partly closes them in an effort to see plainly. The child may complain of blurring out, running together or a fading of the print, and may state that after reading for a few hours, his eyes ache, or that his eyes run water, and that he has the headache. There may be a wrinkling of the forehead, twitching of the muscles of the head or face, and an occasional occurrence of styes on the lids. Defective vision is ascertained by the use of Snellen's Test Cards. The cards should be placed where they can be seen well, so that the center is on a line with the head of the child under examination. The pupil should stand on a line or a spot that has been measured and marked twenty feet distant from the card. Each eye should be tested separately by covering the other eye with a thick piece of paper or card board. Starting at the top of the card the pupil calls the letters aloud. In recording the results of the test the distance between the child and the card is the numerator of the fraction used to designate the condition of the vision, and the smallest type correctly read, according to the distance which it should normally be seen becomes the denominator. For illustration, if the child is seated or standing twenty feet away and can read only as far down as the letters marked thirty feet, and can read no farther, the vision acuity is said to be 20/30. If some of the letters are miscalled, then the minus sign is placed after the fraction (20/30-), etc.

The use of the astigmatic chart is similar except that the child is requested to tell which of the parallel lines look blackest and clearest. If they all look alike, then we infer that no astigmatism is present, but when a particular axis is mentioned it suggests error of refraction in opposite axis.—Newmayer.

It is to be borne in mind that the use of these test cards make it possible for us to detect only well marked errors of vision or cases in which there is not sufficient accommodation to overcome the error in vision.

## EYE DISEASE

By disease of the eyes is meant a condition of the eye varying from the normal, such as inflamed eyes, growths on eye, or ulcers on pupil, irregular pupil, cloudy pupil and not properly reacting pupils, etc.

## DISEASED LIDS

This refers to puffiness of the lids, inflamed lids, styes, tumors, inflamed edges of lids, etc.

## HEARING

Hearing should be recorded in terms of tenths of the normal distance at which the ticking of a watch can be heard. The watch to be used should first be tested by having five people with normal hearing determine the average distance at which it can be heard. For example, if this distance should be thirty inches, it would be recorded at 10/30. If a child could only hear it at twenty inches, then it would be 10/20. Each ear should be tested separately, the teacher standing behind the pupil, who has one ear covered and both eyes shut.—Newmayer. Another method is to use the whispered voice. "The child is placed in the corner of the room away from the door or noises with his back to the teacher. He is instructed to repeat every word he hears. His left ear is then closed tightly with his left hand. The examiner stands twenty feet distant and in a clear, distinct low tone, pronounces the words for the child to repeat. If they are properly heard, the hearing is marked normal. The result is marked whispered voice heard at ten feet or at whatever distance it was." It has not been found practicable except in extreme cases to test the vision and hearing of children under the third grade.

## TEETH

No explanation is necessary.

## TONSILS—ADENOIDS

Notice relative size of throat in comparison to tonsils. Ragged and diseased tonsils, though very small, are said to be dangerous to health. Some of the permanent effects of adenoids and enlarged tonsils are, according to Newmayer:

1. Danger of obstruction to breathing and improper aeration of the lungs which may influence the health and mental development of the child.
2. Changes in the expression and contour of the face.
3. Defective speech.
4. Dangers of ear complications, inflammation, otorrhea, and defective hearing.
5. Increased liability to infectious disease, especially diphtheria and scarlet fever.
6. Frequent attacks of colds and nasal catarrh.

## CLEFT PALATE

Is there a gap in the roof of the mouth in the hard or soft palate?

It will more than repay, in keeping up a good average attendance and preventing the spread of many infections, if the teacher will each morning conduct an inspection of the pupils for those suffering from rashes, acute colds, sore throats, fevers, acutely inflamed eyes with mattering lids, etc. Students affected with any of these ailments should be excluded from school pending further developments.

Periods of exclusion from school for communicable diseases taken from report of the A. P. H. A. Committee on Standard Regulations:

#### **DIPHTHERIA**

Until virulent germs or baccilli have disappeared from nose and throat, as is shown by two negative cultures taken at intervals of not less than twenty-four hours.

#### **CHICKENPOX**

Until primary scabs have disappeared from the mucous membranes and the skin.

#### **FAVUS**

Until skin and scalp lesions are healed.

#### **GERMAN MEASLES**

Eight days from onset of the disease.

#### **MEASLES**

During the period of catarrhal symptoms and until the cessation of abnormal mucous membrane discharges; minimum period of seven days, from two days before to five days after the appearance of the rash.

#### **MUMPS**

Unknown but assumed to exist until the parotid gland has resumed its normal size. Jacksonville City Board of Health excludes for fourteen days. Some authorities advise exclusion for seven days after swelling has gone down.

#### **POLIOMYELITIS (Infantile Paralysis)**

Period of communicability unknown. Apparently not more than twenty-one days from onset of the disease.

#### **SCARLET FEVER**

Four weeks from the onset of the disease and until all abnormal discharges have stopped and all open sores have healed.

#### **TRACHOMA**

During the persistence of lesions of the conjunctive and the adnexed mucous membrane or of discharges from such lesions.

#### **WHOOPIING COUGH**

Probably not longer than two weeks after the development of the characteristic whoop.

Acute cold, sore throat, tonsillitis, body or head lice, ringworm, impetigo contagiosa and scabies, exclude until recovery. Sore eyes, exclude while acutely inflamed or accompanied by discharge.



"There is nothing in this world so important as children, nothing so interesting. If ever you wish to go in for some form of philanthropy, if you wish to be of any real use in the world, do something for children. If the great army of philanthropists ever exterminate sin and pestilence, ever work out our salvation, it will be because a little child has led."—David Starr Jordan.

## REFERENCE LIST ON THE MEDICAL INSPECTION OF SCHOOL CHILDREN

Compiled by F. R. GREEN, *Secretary Council on Health and Public Instruction, American Medical Association:*

Steven, E. M.—*Medical Supervision in School*. Being an account of the systems at work in Great Britain, Canada, the United States, Germany and Switzerland. Chicago Medical Book Company. 1910. Price \$2.00.

Gulick, L. H., M. D. & Ayres, L. P., Ph.D.—*Medical Inspection of Schools*, Russell Sage Foundation Publication Fourth Edition, 1913. Price \$1.50.

Hogarth—*Medical Inspection of Schools*, New York, Oxford University Press. Price \$2.00.

Cornell—*Health and Medical Inspection of School Children*, Davis. Price \$3.00.

*Medical Inspection of Schools—A Summary of Existing Legislation*. Issued by the Council on Health and Public Instruction of the American Medical Association, 1913.

*School Inspection in Rural Communities*. THE JOURNAL, January 4, 1913, p. 70.

Jones, R. W.—*Medical Inspection of Schools*. Wisconsin Medical Journal, November, 1912. Abstr., THE JOURNAL, July 22, 1911, p. 314.

Hyde, G. E.—*Medical Inspection of Schools*. Northwest Medicine. December, 1912. Abstr., THE JOURNAL, December 9, 1911, p. 1943.

Holmes, G. H.—*Function of Medical Inspection in Checking Retardation*. Journal Medical Society, New Jersey, January, 1913.

Kinney, R. H.—*Plan for Medical Inspection of Country Schools*. Wisconsin Medical Journal, January, 1913.

Gantt, L. R. H.—*Medical Inspection of Schools in South Carolina*. South Carolina Medical Journal, April, 1913.

Parsons, J. G.—*Health Supervision of Schools*. Journal-Lancet, August, 1912.

Dixon, S. G.—*Medical Inspection of School Children*. Pennsylvania Medical Journal, September, 1912.

Holmes, G. J.—*Educational Hygiene and Prophylaxis*. Journal Medical Society, New Jersey, October, 1912.



Holmes, G. J.—Improved Medical Inspection of Public Schools and Its Results. *Journal Medical Society, New Jersey*, December, 1912.

Albert, H.—Diphtheria Carriers and Their Relationship to Medical Inspection of Schools. *American Journal Public Health*, October 1, 1912.

Ayers, S. C.—Civic Medical Inspection of School Children with Special Reference to Diseases of Eye, Ear and Throat. *Journal Ophth. and Oto-Laryngol*, January 19, 1912.

Albert, H.—Diphtheria Carriers and Medical Inspection of Schools. *Iowa Medical Journal*, December 18, 1912.

Goodenough, E. W.—Some Problems Connected with Medical Inspection of Public Schools. *Yale Medical Journal*, November 19, 1912.

Montgomery, A. B.—Medical Inspection of Public Schools. *Boston Medical and Surgical Journal*, December, 1912.

Story, J. B.—Medical Inspection of Schools and School Children. *Dublin Medical Society Journal*, January, 1912.

Nydegger, J. A.—Hygiene of Rural Schools. *New York Medical Journal*, September 15 and 22, 1917.

McNally.—Sanitary Conditions in Rural Schools. *Public Health Journal*, April, 1916.

Dressler, F. G.—Rural School Houses and Grounds. U. S. Bureau of Education. Bulletin No. 12, 1914. 50c.

Heck, W. H.—Health of School Children. U. S. Bureau of Education. Bulletin No. 50, 1915. 20c.

Clark, T.—Rural School Sanitation. *Public Health Bulletin*. No. 77. 15c.

Rural School Sanitation—*The Journal*, January 23, 1915, p. 348.

Rural School Survey—*The Journal*, February 3, 1917, p. 394.

Rural School Conditions in the U. S.—*The Journal*, April 18, 1914, p. 1255.

Nydegger, J. A.—Method of Disposal of Excreta in Rural Schools. *Medical Record*, September 30, 1916.

Barnes, F. H.—Medical Inspection of Schools in Connecticut. *Medical Record*, January 2, 1915.

North, E. A.—Medical Inspection of Schools. *Kentucky Medical Journal*, May, 1916.

Dresslar, F. B.—School Hygiene. U. S. Bureau of Education. Cloth; price \$1.25 net. Pp. 369, with 51 illustrations. The Macmillan Co., 1913.

Medical and Sanitary Inspection of Schools—For the Health Officer, the Physician, the Nurse and the Teacher. By S. W. Newmayer, A.B., M.D., in charge of the division of Child Hygiene, Bureau of Health, Philadelphia. Cloth; price \$2.50 net. Pp. 318, with 85 illustrations. Philadelphia, Lea & Febiger, 1913.

School Health Administration—By Louis W. Rapeer, M.A., Ph.D., New York Training School for Teachers. Cloth; price

\$2.15. Pp. 360. New York Teachers College, Columbia University, 1913.

School Janitors, Mothers and Health—By Helen C. Putnam, A.B., M.D. Cloth; price \$1.00. Pp. 201. American Academy of Medicine Press, 52 N. Fourth St., Easton, Pa., 1913.

Medical Inspection of Schools—Pamphlet printed in medicolegal series by A. M. A. Price 5 cents.

## SCHOOL INSPECTION AND THE LABORATORIES

BY DR. B. L. ARMS

There are several conditions that arise in the inspection of school children, in which laboratory examinations can be of great value not only to the individual but also, and to an even greater extent, to the school and community.

First in importance in this State is probably the examination of the feces for the ova of intestinal parasites and, of course, the most frequent one found is that of hookworm. All too many consider this affects the individual only, but let us consider the other side of the case. Every carrier of the infection is a menace to the community in which he lives for he may be the cause of spreading the infection to many of the other children and adults as well. If a school child is found to be a host of these parasites it clearly shows that there has been soil pollution and a positive report should be followed by a campaign to avoid future cases of this infection. Another way in which hookworm infection in school children influences others is the well known fact that this condition retards the capacity to concentrate and learn their lessons, hence, as any class can only advance as fast as the slower pupils, the entire class is retarded and many times this loss is considerable.

The school is the agency that can do a tremendous service to the State if the teachers and pupils will only constitute themselves into a band to raise the health of the community and with but little leading a body of school children can do a vast amount of good in any locality.

When the children become interested they carry their knowledge and questions home and the parents have these matters brought to their attention.

Now, if Johnnie Jones has been found to be infected with hookworms and he realizes that neglect caused this condition and if other pupils as well insist that the conditions should not exist that can cause them to become infected also, we have a potent lever to clean up the focus of infection. On the other hand when Johnnie's parents are taught that on account of his condition an entire class is retarded and by this means they are not getting as much as they should from the money paid in the form of school tax they are more ready to correct the condition.

Aside from intestinal parasites soil pollution is also responsible for many of the cases of typhoid and dysentery through the agency of flies.

Just a few words in regard to typhoid. Every person should realize that typhoid is only contracted by taking into the mouth some of the excreta of a typhoid patient or a typhoid carrier. The route may be a long or a short one, but there is but one cause of this disease. You frequently hear of typhoid being contracted from a certain water supply, but did you stop to think how the water became infected? Milk borne outbreaks have occurred; did you consider that the milk did not contain the infection as it came from the cow?

In these two instances the water and milk have become contaminated from human excreta. In the former the organisms are simply carried from the source to the next victim, but in the case of milk, not only are they carried but the bacteria multiply in some instances, to great numbers, as milk is a perfect food for them as well as for humans.

The common house fly has been named the typhoid fly and especially in the South is it true that a great many cases of typhoid are caused by them. How is this done? The fly carries the organisms on his feet, wings and body from the feces of a patient or carrier and when he pays a visit to the dining room and walks over the butter, sugar or takes a bath in the milk pitcher he may have just come from a privy, if this is in a locality where there are insanitary privies.

Some of the readers of this may think that a fly can carry but a few bacteria in this way, but they have no idea of the minuteness of these tiny organisms, nor in fact can any one comprehend either the very great or very small things. To show that a fly can carry an incredible number of bacteria we present a few figures from *The House Fly—Disease Carrier*, by Dr. L. O. Howard, page 107, which gives the results of some experiments to determine how many bacteria were carried by flies. It was found that the average number per fly from a series of 256 was 3,061,000. This shows that a bacterium is very small and that the fly is a real menace.

I regret to say there are privies at schools in this State that are not fly-proof, and even worse, there are schools that have none at all.

Every child, after going to the toilet, should wash his hands carefully and should wipe them on an individual towel, and before eating should wash his hands and clean his finger nails. Considerable space has been devoted to the above subject but it is an extremely important one.

We will now turn to the examination of swabs from the throat and while here the real laboratory test is to determine if a certain patient has diphtheria, there are many other conditions that a sore throat accompanies, for instance, "colds," scarlet fever and measles. Colds were mentioned first because they are the most frequent and probably cause more loss of schooling than any of the others. Colds

are communicable, and no child with a "cold" should be allowed to attend school, not only because of the danger of others "catching cold," but because many of the so-called colds are but the early stages of measles, scarlet fever or diphtheria. Here let us emphasize the fact that nothing should be put into the mouth except food and drink, and above all do not eat or drink after another from the same container. Never put a pencil in the mouth or the finger to moisten it to turn a page. These are dangerous as well as filthy habits.

As previously stated, a sore throat is an early symptom of scarlet fever, measles and diphtheria, and no pupil should be allowed to expose others by attending school in this condition.

Unfortunately there is no laboratory examination that assists in the diagnosis of any of the above except diphtheria. In this disease the organisms causing it can be grown on artificial media and microscopic examination of a smear of this usually shows the presence of the diphtheria bacillus.

While the laboratory cannot diagnose colds, measles and scarlet fever, still any "sore throat" may be early diphtheria and a swab should be taken for safety.

If cases of diphtheria have occurred in a school room it is wise to take cultures from all the pupils as some may be infected but, being themselves immune, show no symptoms though they may infect others. On the other hand it is not wise to attempt to control diphtheria by taking swabs from the school children when no cases have occurred.

There is one other laboratory examination that may help school children in this State and that is the examination of blood for malarial parasites. This infection has caused many a child to be backward and to retard others in school, and every carrier of this infection is a menace to the health of others if the mosquito that conveys it from one patient to the new victim is present in that locality and there are but comparatively few areas of any size in this State where they are not present. Remember, it takes the combination of a patient with malaria and the mosquito, chiefly anopheles, to cause a new case of malaria. The laboratories of the State Board of Health are your laboratories. They can assist YOU but little unless you use them.



## School Sanitation

By GEORGE W. SIMONS, JR., *Chief Bureau of Engineering, State Board of Health*

The earliest days spent in school represent a formative period when the mind of the child is in a passive state to easily acquire, copy and retain permanent ideas, thoughts, associations and habits which to an appreciable extent mold the future man or woman. At the early school age the first lessons are taught in the fundamentals of education and living, at an age when the influence of the environment is a very weighty factor exerting a powerful effect on the young, developing child.

Association is a potent element swaying the youngest maturing child. At the school the youngest child is continually associating with those older and as a result of this association soon learns to copy or imitate the latter. These first mannerisms acquired by association and imitation are constantly employed throughout the period of years from 6-14 when the child is attending the public school. A group of older children carelessly disposing waste paper on the floor or school grounds, casting remnants of lunch about the premises, drinking unsafe and dirty water from common drinking cups, all furnish food for the eager young one to imitate. Thus it is readily seen that fundamentally the environment has a perpetuating influence on the mind of the child through the agencies of constant association, imitation and repetition until when finally the child of six has attained the fourteenth year, the habits of eight years practice have been firmly fixed and the activities and modes of conduct of the earlier years are carried into the home where they are seldom little changed in future years.

A small percentage of those who complete their public school courses enter the higher city school to be further trained and there have their earlier ideas modified or wholly abandoned but, the large percentage who never reach the high school should also receive a proper environmental training. For this reason our public schools should be models, and lessons in sanitary teaching should stand forth as beacon lights to educate the youth in the lessons of better and more wholesome living. The teaching of personal hygiene by means of influential environment, sanitary school buildings and equipment is of fundamental significance.

The child's body as well as its mind attends the school and therefore the body should be properly trained, developed and cared for. If the child is taught the lessons of sanitation by means of its environment and subsequent habit the principles of personal hygiene become second nature and preventive medicine can thus be more thoroughly appreciated and understood. Prof. Rosenau says: "The combination of compulsory education and schools, having an un-



balanced curriculum or impure water or vitiated air or improper sanitation, is nothing short of a crime by the State against the State. The child profits directly from attendance at a school which has due regard for the child's physical well being and the development of his character; the State profits indirectly from the lessons in sanitation and hygiene which are carried into the child's home, and are applied as a matter of course in the home of the future citizens."

### SITE

The school building should by all means be favorably, conveniently and centrally situated in the district to be served. The site should not be hastily and rashly decided upon before considering from every angle the possibilities of obtaining a satisfactory water supply and sewerage system. A neglect of such significant factors would eventually be serious. Furthermore, the site should be on dry ground, remote from any low or swampy place, removed from barnyards, slaughter-houses or other offensive places emanating foul odors polluting the atmosphere. It should preferably be on a high, well-drained land of sufficient area to allow for play purposes. The play ground should be well graded, drained and free from depressions which would retain pools of water. For aesthetic reasons shrubs, flowers and vines should be planted and encouraged. Substantial structures well placed have a decided effect on the young mind.

The orientation of the school building is of prime importance. It should be placed on the lot for the attainment of maximum illumination efficiency, so that during some portion of the day sunlight will be admitted because of its germicidal properties. Schools having a north or south frontage secure the most sunlight.

### BUILDING

Within recent years the design and construction of school buildings has received much deserved attention and study from architects, especially as regards lighting, ventilating, heating and provisions for comfort and health. As a result of this more intensive study the modern school offers considerable improvement over its predecessors from a sanitary standpoint. The up-to-date public and high school is fast approaching the ideals set by many theorists. At the end of this article is to be found a bibliography relative to schools, which may be of interest and service.

### THE SCHOOL ROOM

The school room is the unit in planning the building and the size of the latter should depend upon the number, sizes and disposition of the several units comprising the whole. The number of pupils to accommodate, the ages of such pupils, the nature of the work to be done, the direction of light, the ventilation and heating are items to be thoroughly weighed previous to actual design.

The minimum floor space per pupil should be fifteen square

feet, generally about eighteen square feet, and 200 cubic feet of air space is the minimum commonly allowed. No teacher should be required to have classes exceeding thirty pupils. Following are Boston standards:

**Elementary Grades**—Twenty feet by twenty-eight feet for elementary grades. Twenty feet by thirty feet for upper elementary grades. Twelve feet high in clear.

**Kindergarten**—Eight to nine hundred square feet of floor surface.

**High School**—Twenty feet by thirty-two feet for forty-two pupils. Thirty-three feet eight inches by forty-three feet for sixty-eighty pupils. Three thousand seven hundred and fifty to four hundred square feet with a height not less than twenty-four feet for high school gymnasium.

The **WALLS** of the class-room should be plastered and tinted with a suitable and agreeable color giving a pleasing effect, absorbing the least light, not taxing the eyes and at the same time giving a maximum reflection. Above all else, glaring walls should be avoided, gray or light green walls with cream ceilings to be recommended.

**FLOORS** should be of a good, well-planed, hardwood, preferably laid in widths not exceeding two inches. At occasional intervals the floor should be treated with an oil preservation and dust settlement.

Careful attention should be directed to the **BLACKBOARDS** to acquire the proper width, material, at a suitable height, and receive the most favorable light. Greenish or strong black slate is the best and cheapest material in the end, although several compositions are on the market. Blackboards should be four feet in width and placed on the wall so that the bottom of the board is thirty-three inches from the floor level. Dustless crayon should be used at all times to avoid unnecessary dust irritation and inconvenience.

**FURNITURE**—The most important parts of the school furnishings, considered from the view of hygiene, are the desks and desk chairs. A child spends so much of his time in school that unless the proper sort of desk and desk chair is provided, defective eyesight and postural defects will result.

In the 1890 report of the Massachusetts State Board of Health appears an interesting and instructive study of the heights of children, by Dr. Bowditch. Twenty-five thousand school boys and girls were carefully measured and weighed, results being as follows. (These data are offered for comparison and illustration purposes only):

**Variations in Height of Boys and Girls (Rosenau)**

	Boys	Girls
Six years of age.....	47.13	47.36
	40.66	40.57
Difference (growth one year).....	6.47	6.79

Eleven years of age.....	57.50	57.96
	49.47	49.33
Difference (growth one year).....	8.03	8.63
Fifteen years of age.....	67.90	65.00
	56.55	57.39
Difference (growth one year).....	11.35	7.61

Besides variations in heights there is noticed a marked variation in growth. The growth of girls is more rapid from twelve to fourteen, while boys grow most rapidly from fourteen to sixteen years of age. The desk and seat must be, therefore, so adjusted as to provide for such differences of height and of growth. The desk chair should be adjusted in order to allow the feet of all children to rest squarely on the floor, the chair being at a proper distance from top of the desk. Some authorities place the latter distance at 1-6 the height of the body. The back should be at right angles to the seat and extend to the shoulder blades, curved concavely from side to side and convexly from above downward. Moreover, the desk should be so arranged to give the greatest sight facility, still separate the pupils sufficiently. The desk selection for a school demands the utmost study and consideration.

Rosenau in "Preventive Medicine," pages 1082-1084, says as follows:

"The desk and seat must be adjusted so as to provide for differences of height and differences of growth. The desk must not be a prison stall, but should be comfortable and roomy. It must not favor the development of myopia and must not force a pupil into wrong postures. The matter is of greater importance than school men generally recognize.

The chair and seat should be of such a height that the thigh of the pupil when seated will be perfectly level, the lower leg being in an exactly vertical position, with the foot resting wholly upon the floor; that is, the thigh and the lower leg will, when the chair is of a proper height, form a right angle with each other. The seat must therefore be adjusted accordingly. The seat itself should not be flat, but somewhat concave, the lowest part of the concavity being where the tuberosities of the ischium rest. The concavity has the additional advantage of counteracting the tendency to slide forward on the seat when the pupils lean back. The seat should have a back rest that will support the small of the back properly without leaning back excessively. Whether or not it supports the rest of the back is of small consequence. Support of the back carried to the level of the shoulder blades is likely to do more harm than good.

The distance between the seat and the desk should be such that the scholar may read at the desk and write on it without leaning forward more than a little and without entirely losing the support

of the back rest. The desk should not be so close as to press against the abdomen, nor near enough to interfere with easy rising from the seat. This means a distance of  $10\frac{1}{2}$  to  $14\frac{1}{2}$  inches from the edge of the desk to the seat back. It also means that the seat must not project under the desk more than an inch at most. The desk should be high enough for the arm to rest comfortably without much resting of the elbow; not, however, so low that the scholar must bend down to write on it.

If the desk top is made to slide backward and forward it will give the pupil more freedom of movement while at the desk and will also permit him to sit down at the desk and rise from it with greater ease. One of the important considerations of a school desk is the proper slope of the top. It is well known that the line of light which least taxes the eyes should fall upon the printed page perpendicular to its plane. To accomplish this some writers recommend a slope of  $45^\circ$  for the desk top; others  $30^\circ$ . These angles, however, are not practicable. The Vienna Expert School Desk Commission recommends an angle of  $15^\circ$  for the desk top, which is also approved by the experiments of Shaw. Such a slope permits a correct posture in vertical writing."

### LIGHTING, HEATING AND VENTILATING

In the average school the light is generally admitted by windows on one or more sides. By all means no windows should be placed in the end or side toward which the children are facing. The ideal method is the admission of light on the left side and rear of the assembly hall, using the opposite side for blackboard space. The light must be of the proper intensity, not too strong nor too dim to be hurtful, but equally diffused.

### HEATING

The heating of schools in Florida is commonly accomplished in the rural districts by jacketed stoves placed in the center of the room. And as a rule such stoves are always poorly placed for the comfort of students. The larger and more modern schools are equipped with furnaces and heating equipment. Direct radiation is inadvisable. Rosenau says: "The hot-air furnace may be used, provided the air is sufficiently moistened, but the direct-indirect system with steam or hot-water pipes is to be preferred. Two thousand cubic feet of air should be provided for each scholar hourly. The Massachusetts law requires thirty cubic feet of pure air every minute per pupil (1,800 cubic feet per hour). The fresh-air inlet should be capacious and separate outlets for the foul air should be provided. The cross-section of inlets and outlets should equal from sixteen to twenty square inches for each scholar. Ordinarily it is preferable to place both inlets and outlets on the same side of the room, viz., upon the inner wall or warm side. When so placed the warm air should be admitted about seven feet above the floor and the foul air should pass out close to the floor." It is



generally accepted that a temperature of about 68° F. is most proper for school rooms.

### VENTILATION

Bad, vitiated air produces injurious physical results. Pure, clean air is necessary for mental activity. Bad air means sluggishness, headaches, inattention, lack of energy and general depression. For most purposes it is proper to allow thirty cubic feet of air per minute per pupil or 1,800 cubic feet per hour, which can be secured by the gravity or natural ventilation system. During pleasant and mild weather the windows should be kept open. At recesses the windows should also be thrown open in order to flush the entire room with clean air. Fresh, cold air is a good tonic. The inlet and outlet for air should be placed on the same side of the room. The inlet about eight feet above the floor, and the outlet should be six-eight inches from the floor. About twenty square inches of vent should be allowed per person, that is for thirty pupils a vent 4.2 square feet in area would serve.

### WATER SUPPLY

Generally, school buildings located in municipalities possessing a water supply system are furnished with an abundant quantity of good, clean, pure, cool underground water derived from the deep underlying limestone strata. Yet some large schools are located in remote places inaccessible to a municipal supply. In such an instance a well should be provided. If the ground is sloping the well should be placed at the highest elevation remote from privies or any other source of contamination. The well should be sufficiently protected by an elevated concrete cap with a surrounding ground carefully graded to the same, thus eliminating the familiar or muddy approach.

The source of a school water supply and its method of serving to the pupils is very essential. Each school should have available a deep well supply cased and protected, offering ample water possessing an unimpeachable quality. The deep cased well is to be preferred to the shallow well which is a constant, potential source of danger. **THE CHILD NEEDS A GOOD QUALITY OF WATER ABOVE ALL ELSE, WATER COMING FROM AN UNQUESTIONABLE SOURCE.** Moreover, the supply should be properly kept in the school building, in a special closed container or cooler. **THE OPEN, RUSTY, BATTERED PAIL SHOULD BE DISCARDED IMMEDIATELY, ALSO THE COMMON DRINKING CUP.** The latter is used altogether too commonly in our schools.

Professor Davidson, of Lafayette College, found human cells from lips on the upper third of a common drinking glass in one school—moreover, he found **GERM CELLS LEFT BY SALIVA DEPOSITED WHILE DRINKING.** Individual cups or glasses brought from home should be encouraged in each school, the teacher should also at the beginning of the term give an explanation of the dangers arising from the use of the common cup so that the child



will realize and appreciate the necessity for the use of an individual glass.

Where water can be piped into the structure it has been the common custom of late to provide bubbling drinking fountains for the use of the pupils and teachers, thereby discarding the old common cup. But even the bubbling fountain is subject to criticism.

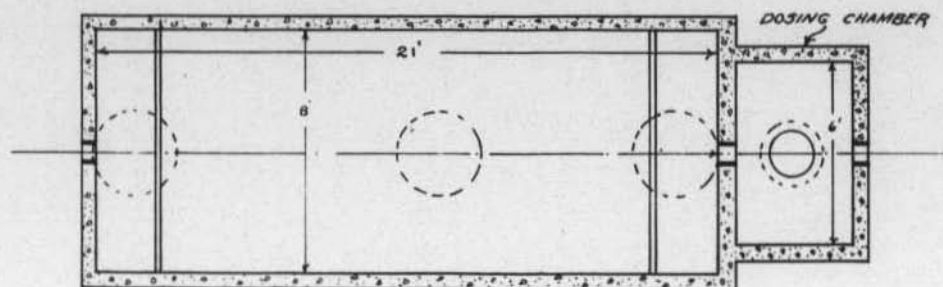
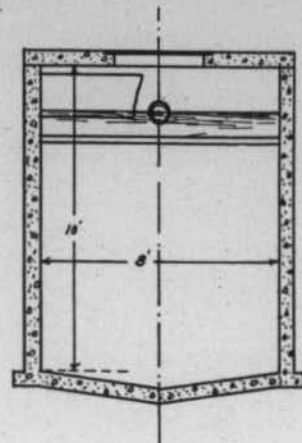
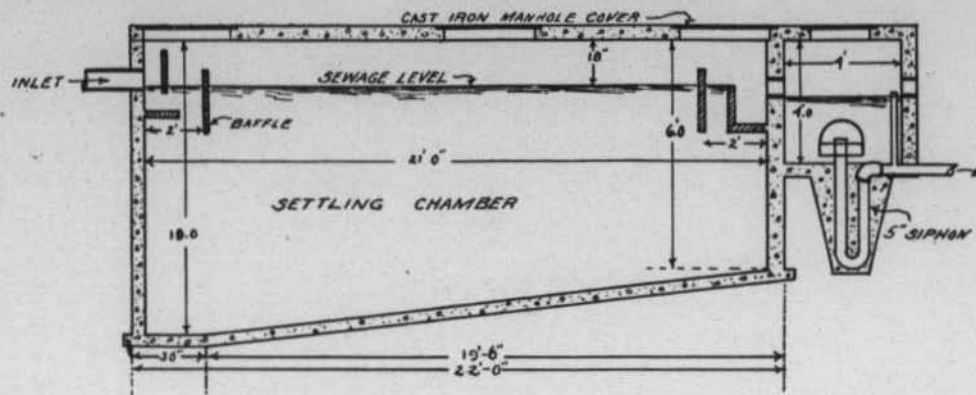
At the University of Minnesota a study was undertaken to determine the sanitary condition of the drinking fountains in use at the University. Seventy-seven (77) fountains representing fifteen different types were examined. Sixty-five per cent. of the fountains were of the continuous flow type and thirty-five per cent. of the intermittent type operated by the consumer. The nozzles of all bubbling fountains discharged the water vertically. The height of the water jet above parts of the fountain that could be touched by the lips of the consumer was less than one inch in forty per cent. of the fountains. Bacteriological examinations conducted on these fountains showed that eighty per cent. were infected with streptococci, and that in water from eleven per cent. of these fountains organisms of this type were found when they were not present in the water supplied to the fountains. The results indicate that drinking bubblers may be a factor in the transmission of communicable disease.

In the larger schools sinks should be provided for the washing of hands and face after play and after lunch to encourage personal hygiene.

### SEWAGE DISPOSAL

Most of the public and high school buildings located in municipalities have sewerage available to the buildings and therefore have installed comprehensive and convenient toilet and laboratory systems. There are other large schools recently built but not available to sewerage. These schools must depend, for the toilet systems, upon some form of septic sewage tank such as shown in figures accompanying.

The primal object of a sewage treatment tank is the removal of settleable, putrescible solid matter retained normally in sewage, and reduce it to a more stable inoffensive form. A small institutional sewage tank will remove only that portion of matter in suspension capable of settling. Fig. 1 shows a single compartment tank equipped with a small dosing chamber, the latter for intermittently discharging the sewage effluent or overflow from the tank into the subsoil drainage system. (See Fig. 3) or onto a small filter bed. In case the effluent or overflow from the tank discharges into a stream the siphon dosing chamber can be omitted. The tank shown in the diagram is capable of caring for the sewage from a school of 250 pupils. Other designs for smaller or larger institutions can be obtained at the State Board of Health, Jacksonville. Fig. 2 shows a double compartment, "two-story" or Imhoff tank. This tank has an upper and lower chamber, the former being known as the settling or sedimentation chamber. The sewage



DESIGN OF A  
SINGLE COMPARTMENT  
**SEWAGE TANK**

CAPACITY 250

SEWAGE DISPOSAL FOR SCHOOLS  
FLORIDA STATE BOARD OF HEALTH  
BUREAU OF ENGINEERING  
GEO. W. SIMONS, JR., CHIEF.

FIG. 1

(228)

## SEWAGE DISPOSAL FOR SCHOOLS

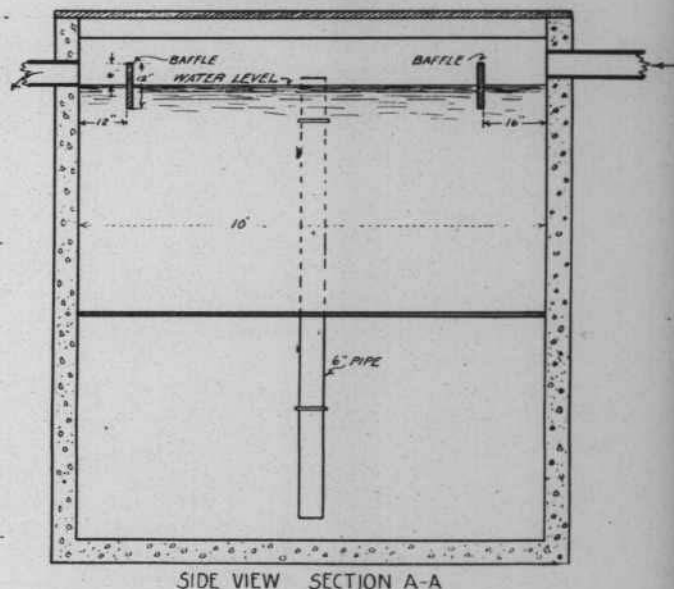
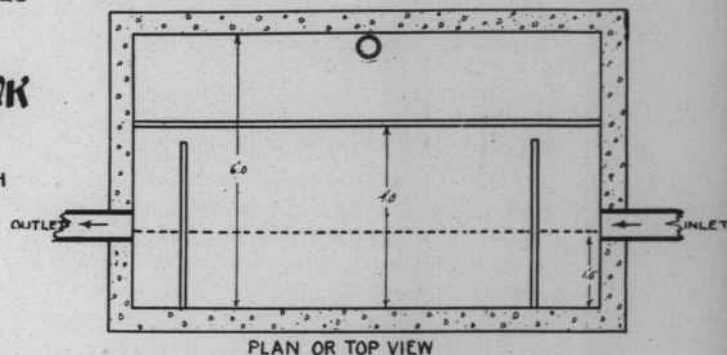
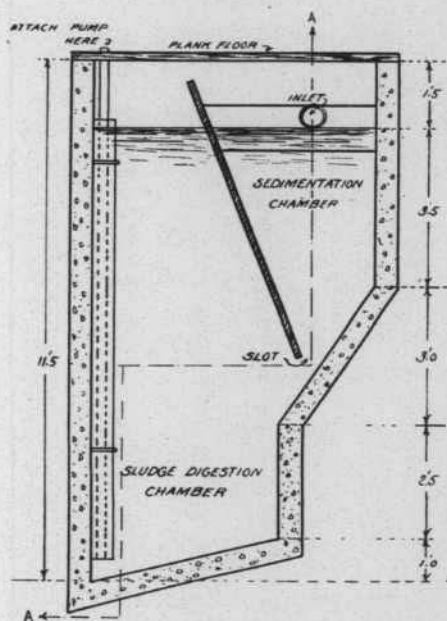
DESIGN OF  
IMHOFF SEWAGE TANK

CAPACITY 250

FLORIDA STATE BOARD OF HEALTH

BUREAU OF ENGINEERING  
GEO. W. SIMONS, JR., CHIEF

FIG 2



flows through this chamber in a direction perpendicular to the plane of the paper. The suspended solid material capable of settling descends downward and passes through the slot into the lower compartment, known as the sludge chamber. This settled matter is known as sludge. In order to furnish a correct design of this tank it is necessary to know the number of pupils which the school will accommodate. Upon receipt of such information the State Board of Health, Bureau of Engineering, can provide the necessary plans.

In case the effluent or overflow from the tank has to be disposed of through the soil layers the system suggested by Fig. 3 should be adopted. These subsurface filters are generally constructed in trenches. The drain line consists of six inch tile laid with open joints, that is the ends should be about one-fourth to one-half inch

apart. The pipe should be laid with a slope or fall of about six inches per 100 feet and there should be one foot for every pupil the building would accommodate. As shown in Fig. 3 the trenches should be lined in the bottom with gravel or cinders. Before filling the trench, a layer of tarred paper should be laid over the gravel to prevent the earth filling from sifting down into the tile line.

There are still other large schools and numerous rural schools in the State not equipped with any inside plumbing facilities and must depend upon the out-of-door privy. And in practically every instance the out-of-door privy presents a deplorable sight from the sanitary viewpoint.

Laws of Florida, Chapter 6836 (No. 30) presents an act providing adequate facilities for nature's conveniences. It requires that all surface closets shall be fly-proof in construction, screened, and in conformity with plans recommended by the State Board of Health. The privies recommended by the Board are of the approved pit and L. R. S. type. The following are the important points in construction of a sanitary, screened, fly-proof privy:

1. The roof shall be water-tight.
2. The house shall be without cracks through which flies may enter.
3. The door shall fit closely and shall be self-closing.
4. The seat shall have self-closing, hinged covers over each opening.
5. All openings for ventilation, etc., shall be screened with wire netting.
6. A ventilating flue shall extend from the night soil compartment to the roof.

### THE PIT PRIVY

The PIT PRIVY (See Fig. 4) should be used only in a very sandy soil and then with a pit lined with cypress on all sides not exceeding three feet in depth. Further information concerning privy location and construction can be secured by addressing a communication to the Bureau of Engineering. No privy or sewage tank should be installed without first consulting the State Board of Health.

### THE L. R. S. PRIVY

The modified L. R. S. privy (Fig. 5) is one now being recommended for use by schools where water supply and constant scavenger service are not available.

The L. R. S. privy is the result of a long time experimentation by the U. S. Public Health Service. The original privy was somewhat elaborated. The one shown in Fig. 5 is operated on the same principle, yet somewhat modified.

Quoting from Public Health Bulletin No. 68, U. S. Public Health Service:

"If human excreta are permitted to undergo natural fermentation, the solid matter becomes liquefied and a considerable pro-

portion of the excrement and urine is carried away by evaporation and gas formation. Thus the labor and cost of disposing of the matter may be lessened.

"This apparatus consists of the following parts:

"1. A water-tight tank to receive and liquefy the excreta.

"2. A covered water-tight tank to receive the effluent or out-flow.

"3. A connecting pipe about  $2\frac{1}{2}$  inches in diameter, about 12 inches long, and provided with an open T at one end.

"4. A ventilating pipe, such as a stovepipe or wooden flue, connecting the space under the seat with the open air.

"The liquefying tank is filled with water up to the point where it begins to trickle into the effluent tank (about two-thirds full). A pound or two of old manure should be added to water to start a fermentation. As an insect repellent a film of some form of petroleum may be poured on the surface of the liquid in each container.

"Although some of the fecal matter floats it is protected both from fly breeding and fly feeding in the following ways: (1) By automatically closing lid. (2) By the water. (3) By the film of oil, and (4) By having the apparatus located in a screened place which should be done for additional safety. The film of oil prevents the breeding of mosquitoes in the tank.

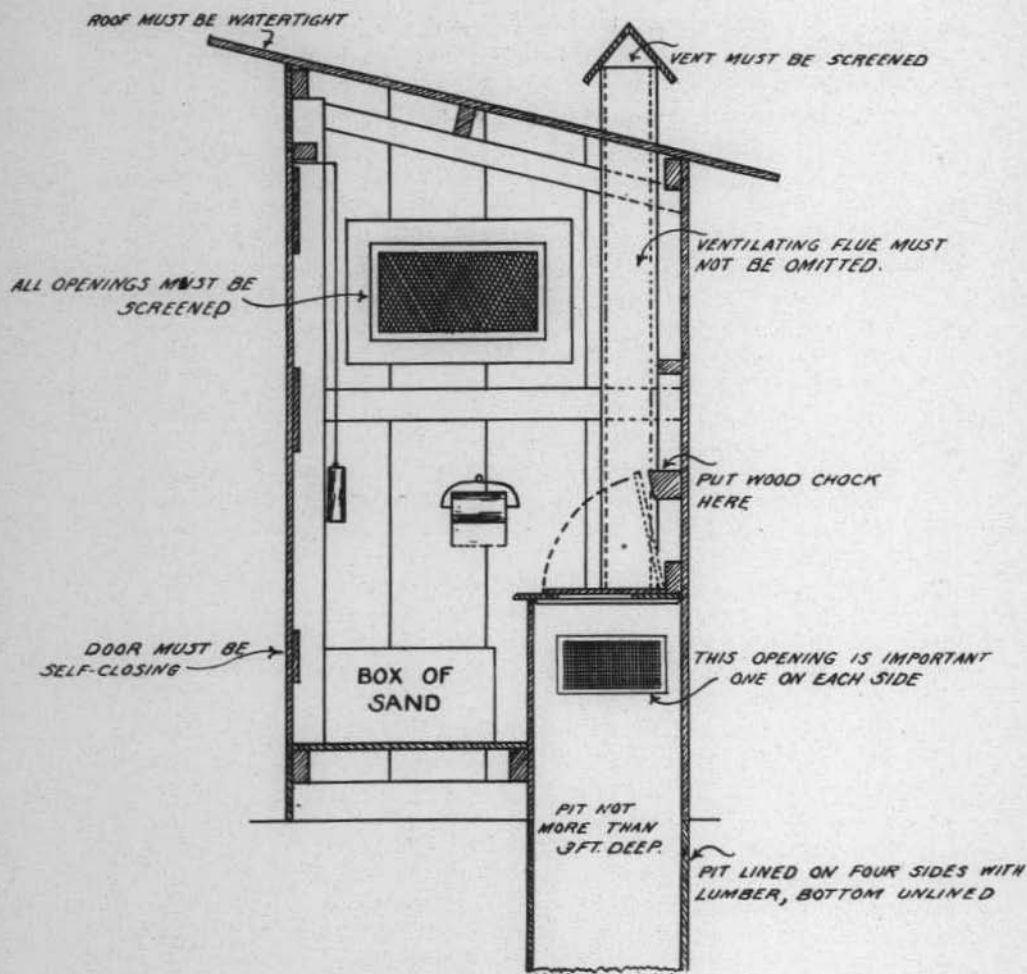
"The fecal material ferments in the water and gradually liquefies. The level of the liquid is raised and the excess flows into the effluent tank, where it is protected from insects by the cover and a film of oil. This effluent may be allowed to collect in the tank until it reaches the level of the connecting pipe, when it may safely be disposed of in any one of several ways.

"Among the advantages of the L. R. S. privy are: (1) It prevents flies and mosquitoes from having access to the excreta; (2) it liquefies the fecal material and reduces its volume so that this material may be safely disposed of much more easily and cheaply than the content of other types of privies; (3) it reduces odor and thus makes the work of cleaning the privy less disagreeable, and (4) it is of simple and inexpensive construction.

"The volume of the effluent from an L. R. S. privy is less than half the volume of the excreta and paper deposited in the liquefying tank and thus is much less than the amount of matter which must be removed from an ordinary receptacle privy used to the same extent. The effluent is liquid and usually has only a slight odor. It is easy also to disinfect by heating or by chemical treatment, and is thus much easier to dispose of safely than are crude excreta.

"Water must be added to the liquefying tank from time to time; how much and how often varies with atmospheric conditions. The more rapid the evaporation the greater must be the amount of water added. Under average conditions about two gallons of water added once a week will be sufficient for a tank of fifty gal-





## SEWAGE DISPOSAL FOR SCHOOLS

### DESIGN OF A **PIT PRIVY**

FLORIDA STATE BOARD OF HEALTH  
BUREAU OF ENGINEERING  
GEO. W. SIMONS JR., CHIEF.

**FIG 3**

lons capacity used by four to five persons. If the matter in the liquefying tank is allowed to become too much thickened proper fermentation will cease and offensive gases will be formed.

"Disinfectants must not be used in the liquefying tank because they stop the fermentation.

"In the L. R. S. privy regular toilet paper breaks up with sufficient promptness. If heavier paper (such as newspaper) is used it will rot more slowly and allowance for this should be made in increased tank capacity. Corn cobs, cotton waste and similar objects would interfere materially with the successful working of the liquefying tank."

The OPEN BACK PRIVY, where the discharges are received on the bare ground surface, are too numerous at our schools, moreover are located within too close proximity to the school assembly hall. This condition must be remedied and the screening law fully observed. A properly constructed out-house or privy, the entire compartment screened and the seats equipped with self-closing covers—the entire structure water-proof and substantial will convey a very important and emphatic lesson to the young mind, educating him in the proper method of excreta disposal to be employed at home as well as at school.

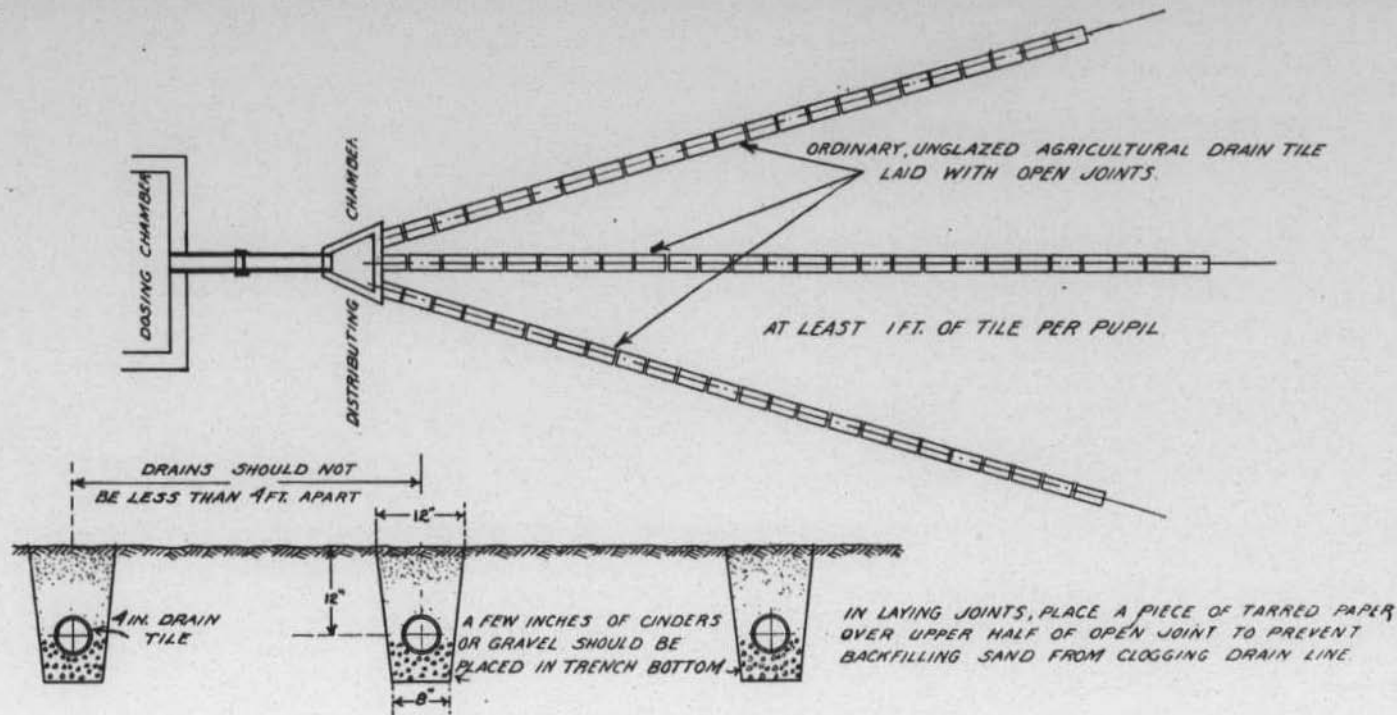
The location of the privies should also receive due attention. The privy for girls and one for boys should be as far removed from each other as possible, both being properly screened for privacy. Each privy should be at least 100 feet apart, also about 100 feet from the building and if placed on sloping ground should be on the downward slope away from the water supply well.

**CLEANLINESS SHOULD BE EMPHATICALLY IMPRESSED ON THE YOUNG MIND IN ORDER TO TEACH THEM THE PROPER USE AND CARE OF THE TOILETS.**

### REFUSE DISPOSAL

The indiscriminating, careless, disposition of paper, lunch remnants, lunch boxes, shavings, etc., around the floors and yards should be avoided. A tightly covered metal can must be placed in each room and the children taught the necessity of placing all refuse therein. The indifferent method of casting discharged material "any old place" leads to slovenly habits which, by repetition, are imparted forcibly to the child. Moreover, such semi-filthy conditions attract flies and thus later convey diseases. A galvanized iron garbage can placed in each room would soon remedy this situation, the content to be burned daily.

Above have been enumerated the most important features of school sanitation which may be applied to every school in Florida without an exorbitant expenditure of money. The foregoing items, if installed, will result in a clean, hygienic environment which will have a lasting and decided effect on the mental capacity of the child and will, in the end, start the real public health education with the youngest of the generation.



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# SEWAGE DISPOSAL FOR SCHOOLS

## PLAN FOR SUB-SURFACE DRAIN SYSTEM

FLORIDA STATE BOARD OF HEALTH

FIG 4. BUREAU OF ENGINEERING  
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## BIBLIOGRAPHY

Sanitation of Rural Schools—Minnesota State Board of Health, (1916).

School Hygiene—Supplement No. 25, United States Public Health Reports.

Rural School Sanitation—Public Health Bulletin No. 77, U. S. Public Health Service.

Drinking Fountains—Reprint No. 397, U. S. Public Health Reports, May 11, 1917.

Plans for Public Schoolhouses—Superintendent Public Instruction, Raleigh, N. C.

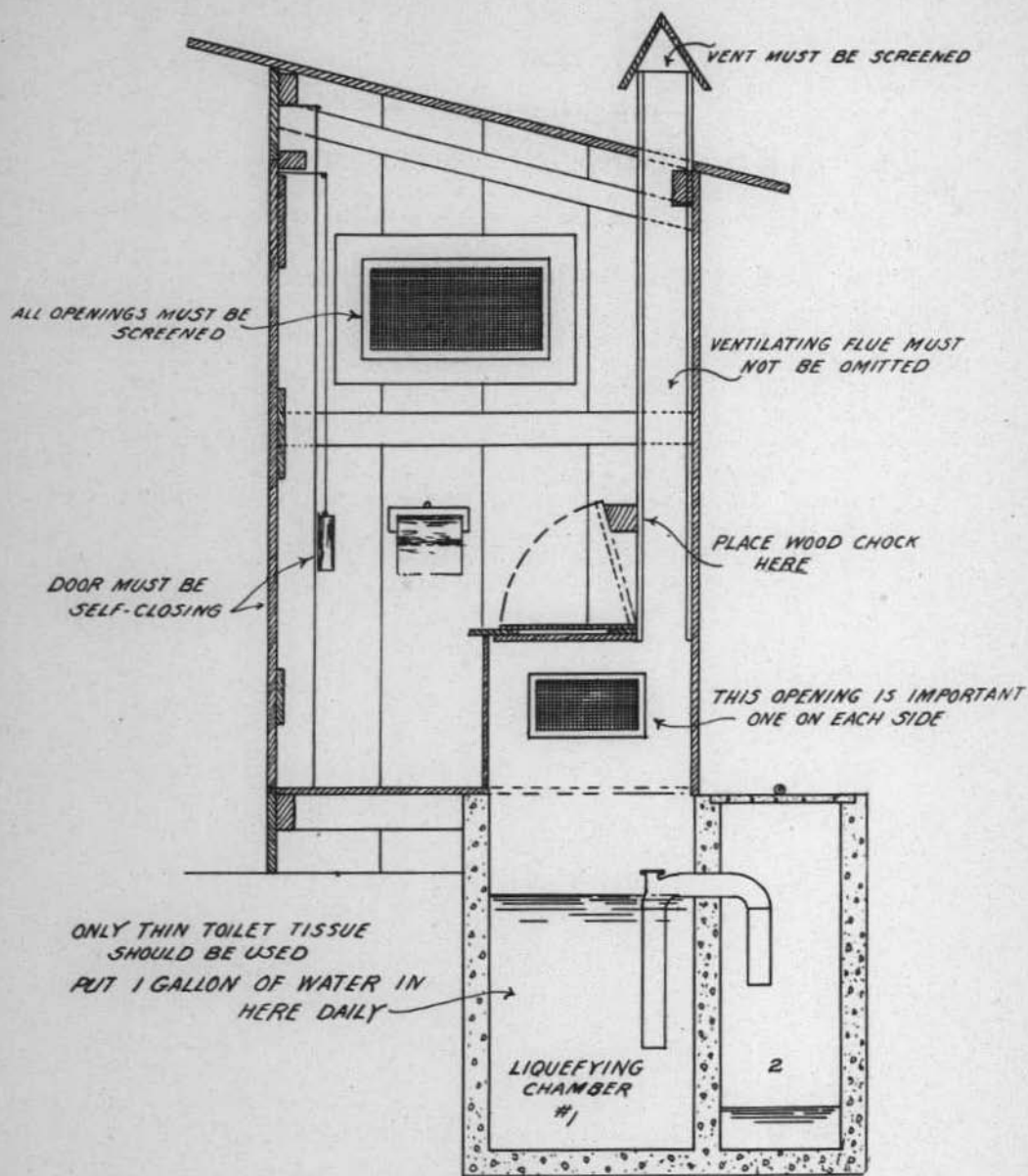
The One-room and Consolidated School of Illinois—Superintendent of Public Instructions, Springfield, Ill.

Manual of Equipment—Department of Public Instructions, Lansing, Michigan.

Grade School Building—Bruce, Milwaukee.

Rosenau, Preventive Medicine—Appelton, N. Y.

Shaw, Edward R., School Hygiene—MacMillan, N. Y.



SEWAGE DISPOSAL FOR SCHOOLS  
DESIGN OF A MODIFIED  
**L.R.S. PRIVY**

FLORIDA STATE BOARD OF HEALTH  
BUREAU OF ENGINEERING  
GEO W. SIMONS, JR., CHIEF.

FIG 5



## Eye and Ear

### INATTENTION

The appearance of inattention in school children should at once suggest that there must be a cause for it. There are two common causes for it: defective vision and defective hearing. Another cause, defective mentality, will not be here considered. Defective hearing is probably less noticed than defective vision, as the latter is evidenced in other and noticeable ways. The external condition of the eyes is apparent, and the attitudes to assist vision are not easily overlooked. The careless, vacant, expression associated with poor hearing, however, is not always recognized. The general rule that inattention is due to some condition which needs correcting should be constantly borne in mind. Both pupil and teacher will be saved much useless effort and annoyance by its observance.

### PROGRESSIVE NEARSIGHTEDNESS

Eyes are apt to become nearsighted in the early years at school, and excessive reading will cause this nearsightedness to increase rapidly up to perhaps the student's eighteenth year. He is then, because of his poor sight, barred from those occupations in which it is not permissible to wear glasses, and his weakened eyes are predisposed to various diseases injurious to vision.

When nearsightedness is discovered early and eyeglasses are given that make distant vision normal and needless near work is forbidden, the nearsightedness may be held in check and any considerable increase prevented. But the existence of nearsightedness is not often discovered early, for the child does not know that his *distant* vision is failing, nor do his parents find it out, and his teacher is usually the first to notice the defect.

Recently it has become customary in the public schools to test the vision of all pupils periodically. By this means nearsightedness is discovered while it is still of low degree, and measures are taken to prevent its progression. In many private schools the necessity of periodic tests of vision by teachers has not yet been learned, and oculists see many neglected pupils of these schools who have become needlessly nearsighted before their condition has been discovered accidentally. Tests of vision should be made every year.—*National Committee for Prevention of Blindness.*

---

### EYE-STRAIN FROM ILLUMINATION

You can get good illumination from oil, gas or electricity, without causing eye-strain, but by misuse you are likely to get lighting that is bad, costly and dangerous to the eye-sight.

Be sure to observe the following points:

1. Don't judge illumination by the brightness of the lamps. A well-shaded lamp may look dim, because it is well shaded, but yet be giving first-class light for working purposes. Judge the light by the way it helps you to see what you are looking at.

2. Don't work in a flickering light.

3. Don't expose the eyes to an unshaded light.

4. Don't face the light. When reading or writing it is best to have the light come from the left and from above the shoulder, so that no shadow will be cast on the page which you are reading.

5. Don't let lamps and globes get dirty.

6. Use light wall-paper or tinting. Dark walls absorb light strongly, instead of reflecting it. A very dark wall-paper or dark wood finish may require three or four times as much light as a really light finish. Reds, greens and browns reflect only ten to fifteen per cent. of the light which falls on them. White, cream color and light yellowish tints reflect over one-half the light.

Give your eyes every advantage when using them in artificial light.—*National Committee for Prevention of Blindness.*

# FLORIDA HEALTH NOTES



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# Rabies

## HISTORY

Rabies is undoubtedly one of the oldest diseases in existence. It is a malady which has been perpetuated by the lower animals, chiefly by the dog family, and is transmitted to other animals, including man, by the introduction of virulent saliva through the bite. There is no doubt but that the disease is caused by a specific micro-organism (negri bodies) which invades the nervous system, produces certain changes which are followed by a characteristic line of symptoms. The period of incubation is a variable one both as to the animal and the duration of time. Fortunately it is a relatively long one, lasting as a rule from one to two months.

The symptoms in brief are those of excitation ending in depression of the central nervous system with a final destruction of its functioning power. The intense and morbid anxiety characterizing the onset shades gradually into delirium and mania to which death soon comes in merciful relief. The disease is practically the same in all susceptible animals and a similar method of laboratory diagnosis is employed in each instance. It is the most fatal known and when once established ends almost invariably in death.

The first mention of rabies in historic literature was made by Aristotle in the fourth century B. C. He speaks of the disorder as being purely a disease of animals which was carried by the bite of one animal to another.

Celsus in the first century gave a detailed account of the disease as affecting the human. He attributes the cause of the malady to the bite of rabid animals and advises that such a wound be bathed thoroughly and then burned with a hot iron, if the development of the disease would be prevented. He states that when the symptoms once appear death always follows.

A great many hundred years passed, in which though much was written, nothing of material interest was added to what had already been discovered. The paralytic form of the disorder was recognized by Van Swieten in 1771. Zinke in 1804 carried out successfully experiments with the virulency of the saliva of dogs and other animals and showed the destructive action of phosphorous and arsenious acid on the virus.

In 1813 Gruner recommended the inoculation test of animals with the saliva of suspected dogs to establish the diagnosis. The same year Count De Salm-Reifersheid made numerous successful inoculations. The first demonstration, however, of the identity of the disease in man and animals was made by Magendie and Breschet who transmitted it from man to dogs through the saliva.

Of the host of deep thinkers and scientific research workers who engaged in a study of the rabies problem in the nineteenth



century, the name of Louis Pasteur stands out in bold relief as the man who, in 1880, first discovered that the disease could be prevented by inoculating doses of gradually increased strength of the virus into the person or animal bitten. He did not discover the specific micro-organism which caused the trouble, but he did open up or point out the way through which our present knowledge has been acquired.

The old practice of relying for diagnosis upon rabbit inoculation, which meant a wait of from fifteen to twenty days, before the patient knew whether or not the treatment which he was receiving was necessary, was superseded in 1903 by Negri, who found certain bodies (negri bodies) in the nerve cells in sections of the central nervous system. He held that these bodies was specific in rabies, and further, that they were the cause of the disease. His findings have been substantiated and their reputed significance accepted.

Medical literature also contains many superstitions, which while of ancient origin occasionally find a modern and misguided expression. It was the impression of Avicenna, that the little figures of dogs, which were merely small blood clots, contained in the urine of a hydrophobia patient after the administration of cantharides, were the cause of rabies; and that their elimination would result in a cure. Frederick the Great issued an edict that the "mad worm," which was a normal cartilage, should be cut from the tongue of all dogs to prevent their going mad. He also paid a large sum for a much advertised secret cure, which turned out to be an emulsion of "may worms in honey."

A popular method of diagnosis of another period was the stripping of the feathers from the breast of a living fowl and applying it to the denuded area of the wound. If the dog was mad the fowl would die, but if it remained well no alarm was to be felt.

Mad stones still enjoy a patronage in some sections of the United States. They are calculi obtained from various portions of the alimentary tract of the lower animals and according to White are composed mostly of tricalcium phosphate. It is a one time popular belief that they adhere to poison wounds and remove the virus, which is evidenced by the discoloration occurring when they are subsequently boiled in milk. It was the practice to apply them while hot, and if any good ever attended their application it was most probably due to their cauterizing effects provided they were hot enough when applied.

Despite a widely circulated popular idea that rabies prevail only during certain months of the year, which are commonly designated as "dog days," the impression has no foundation at all in fact. It has been explained that this erroneous report resulted from the fact that during the warm season more men and animals are abroad and hence are more liable to come in contact with the infection. As far as susceptibility is concerned, there is no difference at all between the seasons, as is shown in the following tables:

Based on	Author	Place	Year	March Jan.-	June April-	Sept. July	Dec. Oct.
Rabid animals	Schudder	Germany	1886-1901	24.4%	27.6%	25.5%	22.5%
Rabid dogs	Schudder	France	1897-1901	24.2%	27.4%	25.4%	23.0
Person bitten	Blatchford	U. States	1856	33.3%	25.3%	24.3%	15.3%
Average taken from table	Various			25.0%	27.4%	25.2%	21.3%

That the rabies problem in Florida is gradually becoming more serious is quite obvious. In 1916, one hundred and twenty-two examinations were made in the laboratories of the Board to determine whether animals were rabid. Thirty-seven of them were found to be positive. Fifty-seven persons were said to have been bitten by rabid animals or supposedly rabid animals and received the treatment through the office of the State Board of Health. Two deaths were reported.

Last year (1917), the Laboratories of the Board examined one hundred and forty-four specimens of supposedly rabid animals. Seventy-six were positive, sixty-two negative and six doubtful or decomposed. Treatment was sent out to one hundred and thirty-four. One death occurred during the year. All receiving the treatment were indigent except twenty-seven. The distribution of these treatments by months and according to counties is interesting:

January..... 9	April..... 9	July..... 7	October..... 6
February.....15	May.....13	August.....12	November..... 2
March.....29	June..... 5	September.....17	December.....10
Total..... 134			

Alachua..... 2	Dade ..... 3	Jackson ..... 3	Manatee ..... 0
Bay..... 0	DeSoto ..... 1	Jefferson ..... 5	Marion ..... 0
Bradford..... 0	Duval .....74	Lafayette ..... 0	Monroe ..... 0
Brevard..... 1	Escambia ..... 2	Lake ..... 0	Nassau ..... 0
Broward..... 0	Franklin ..... 0	Lee ..... 0	Okaloosa ..... 0
Baker..... 0	Flagler ..... 0	Leon ..... 5	Orange ..... 0
Calhoun..... 0	Gadsden .....10	Levy ..... 0	Osceola ..... 0
Citrus..... 0	Hamilton ..... 1	Liberty ..... 0	Okeechobee ..... 0
Clay..... 1	Hillsborough ..... 3	Madison ..... 2	Palm Beach..... 0
Columbia..... 0	Holmes ..... 0	Hernando ..... 1	Pasco ..... 0
Pinellas ..... 0	Polk ..... 0	Putnam ..... 8	St. Johns ..... 0
St. Lucie..... 1	Santa Rosa..... 0	Seminole ..... 0	Sumter ..... 0
Suwannee ..... 0	Taylor ..... 0	Volusia ..... 0	Wakulla ..... 0
Walton ..... 0	Washington .... 2		
Total..... 134			

In many of these instances individuals have been compelled, for security, to take the treatment because of the too frequent habit of killing the dog and never thinking of having its brains examined until the carcass had been decomposed.

It is seen that the malady is fairly distributed over the State. Mention might also be made of the fact that rabies has been diagnosed in animals that had not bitten any one, in some of the counties which appear clear in the above tabulation. No account has been taken of the number of domestic animals which have been destroyed following the bite of a rabid dog or which have died from the effects of the disease. Reports of epidemics which have occurred in the different counties are too fragmentary for one to undertake a discussion of the economic cost of the dis-

order to the stockmen. The focus about Jacksonville, from official records, appears to be an old one. New foci have recently appeared in the neighboring counties of Clay and Putnam, which can safely be assumed to be an extension from Duval County infection.

The incubation period of rabies is particularly noted for its variability and length, extending from ten days to as long as a year. Unusual lengths often lead to the suspicion of an unobserved exposure. It is an established fact that the saliva of rabid dogs is virulent or infective for several days before the dog shows any sign of the disease. It is also possible that the licking of an abraded surface by a strange dog might escape one's notice. The factors which influence the length of incubation according to A. M. Stimson, Hygienic Laboratory, Bulletin No. 65, page 21, are:

1. The Species of Animal Affected.—A review of the statistics on this subject appears to indicate that the period is longer in man than in the lower animals and is also proportionate to the size of the animal bitten.

2. The Site of the Bite—The accepted view is that the nearer the brain, the shorter the period since the distance of nerve travel is less.

3. Sex—The female of the human species is said to exhibit a shorter period than the male.

4. Children have usually shorter periods of incubation than adults, but this may be that the bites in children are frequently severe and about the head.

5. Severity of the Wound—Wounds in which nerve trunks or muscles are torn, result in a relatively shorter period of incubation, both because of the large amount of the virus introduced and because it is brought into immediate contact with the nerve tissue.

6. It is probably true that the early onset of the disease may be induced by certain causes which tend to weaken the resistance of the nervous system. As for instance alcoholic indulgencies, sudden shocks, and certain diseases affecting the nervous system.

7. Treatment—Nitsch has pointed out that in a large series of cases the deaths, in spite of the treatment, occurred on an earlier average than in untreated persons (64½ to 90 days), and that this would naturally be expected when the rationale of the treatment is understood, since cases in which the incubation period would have been long, if untreated, are those which afford the most time for the establishment of the immunity if treated.

8. There is some reason to believe that rabies virus, as it occurs in nature, varies much in virulence and that this is in some way related to geographical distribution. Thus, the short periods of the cases reported in Egypt by Bain and Maloney may have relation to an especially potent virus in this region as compared with that commonly prevalent in Europe.

In 1886 Baur published the result of an investigation into the inoculation of five hundred and thirty-seven cases of human rabies. Seventeen of these cases had an incubation of over one and one-fourth years. Ten of the remaining cases he regarded as doubtful. The average period for the other five hundred and ten cases was seventy-two days. The period of ages is as follows:

<i>Number of persons.</i>	<i>Age.</i>	<i>Average period.</i>
120	2 to 14 yrs.	57.0 days.
182	15 to 20 yrs.	77.5 days.
45	51 to 70.0 yrs.	70.0 days.

Considering the location in 252 cases the average period was:

For 73 cases of head and neck bites.....	55	days
For 3 cases of buttock bites .....	26	days
For 144 cases of upper extremity bites .....	81½	days
For 17 cases of lower extremity bites .....	74	days
For 15 cases of bites on several parts of the body, many being on the head .....	55	days

The influence of the animal in modifying the virulence and severity of the bite is seen in—

49 Wolf bites .....	39	days
293 Dog bites .....	73½	days
31 Cat bites .....	80	days
2 Fox bites .....	33	days
1 Cow bite .....	30	days

The incubation period in animals according to Nocard and Leclainche is for—

Dog and cat, 15 to 60 days average.  
Horses, 15 to 60 days average.  
Cattle, 1 to 3 months average.  
Sheep and goats, 15 to 30 days average.  
Swine, 15 to 30 days average.

**SYMPTOMS**—Farmers Bulletin 449—Rabies or Hydrophobia—by John R Mohler, V M D, pages 8 to 11

#### SYMPTOMS

The symptoms of rabies are quite characteristic, and may be divided into two types—(1) the furious, violent, or irritable, and (2) the dumb or paralytic. They vary somewhat in each species, but as the disease in the dog is the most important, it will receive principal attention at this time.

#### FURIOUS RABIES IN THE DOG

Following the period of incubation of the disease, which is usually between three weeks and three months, there is first noticed in the furious form of rabies a marked change in the disposition of the animal, which should at once arouse suspicion. An affectionate dog may become morose and depressed, while a snapping, treacherous animal may become cowardly or affectionate. This is known as the stage of development, and in one or two days is followed by an irresistible tendency to roam. If prevented the dog will fight or bite at the restraint or at anything that interferes with his freedom. This roving may occur for one to three days, during which he travels aimlessly in a nervous and irritable condition. His instinctive methods of defense are nearly always highly developed or exaggerated, but he seldom willfully attacks persons or other animals without provocation. When he returns, if not destroyed in the meanwhile, he shows from his exhausted, dirty, sheepish, or depressed appearance evidences of wandering. Having returned home, he frequently seeks secluded places such as are found under the house or porch.

During this period of roving he exhibits a disposition to eat or chew indigestible objects, as rags, leather, straw, feathers, sticks and even pieces of coal, which are often swallowed. The secretion of saliva in some cases appears to be excessive, owing to the inability to swallow, and it sometimes becomes frothy from the champing of the jaws. However, foaming at the mouth is not a constant symptom of rabies, as is commonly believed by the layman; and furthermore, it is frequently misleading owing to the fact that it may be observed in other diseases. The erroneous opinion among the laity that dogs suffering with



this disease are afraid of water is also misleading, since such dogs have been known to swim streams in their roamings. On the other hand, they appear to be afraid of nothing, as is evidenced by attacking all animals regardless of size.

A change in the voice of the animal is peculiar to this affection, and is due to the beginning paralysis of the throat, which usually sets in early. Instead of the normal bark the affected dog makes a long, resonant, peculiarly drawn-out bark which has been likened to the yelp of a coyote. Later, as the paralysis gradually extends, barking and swallowing become impossible, although attempts may be made to swallow. At this stage the muscles of the jaw become paralyzed, causing the lower jaw to drop and the tongue to hang out, which makes it collect dirt and appear dry and darker in color. Owing to this latter symptom the disease has been termed "black tongue" in certain sections. Upon closer observation the pupil of the eye is frequently found to be dilated. The paralysis continues to extend, the hind legs become involved, and the dumb form of the disease results. Finally death follows in from four to eight days after the development of the first symptoms.

#### **DUMB RABIES IN THE DOG**

The dumb or paralytic form of rabies is much more infrequent than the furious type, and is characterized by the early appearance of paralysis without symptoms of frenzy or irritability which are observed in the early stages of the furious form. Therefore the animal affected with this type of the disease is not capable of doing much damage. Indeed the dog is much depressed from the beginning and seeks quiet spots or hides in some secluded place. Probably the first symptom noted by the owner is the paralysis of the lower jaw, as a result of which the animal is often suspected of having a "bone in its throat." The paralysis quickly progresses until it involves the legs and trunk and results in death in from one to three days.

#### **RABIES IN CATTLE**

In cattle both furious and dumb rabies are met with as in dogs, the former being the more common. However, a sharp line of distinction can not always be drawn between these two forms of the disease, as the furious type usually merges into the dumb, due to the paralysis which always appear prior to death. The typical cases of dumb rabies are those where the paralysis occurs at the beginning of the attack and remains until the death of the animal. The disease first manifests itself by loss of appetite, stopping of the secretion of milk, great restlessness, anxiety, manifestation of fear, and change in the disposition of the animal. This preliminary stage is followed in a day or two by the stage of excitation or madness, which is indicated by increasing restlessness, loud bellowing with a peculiar change in the sound of the voice, violent butting with the horns and pawing the ground with the feet, with an insane tendency to attack other animals, although the desire to bite is not so marked in cattle as in the canine race. About the fourth day the animal usually becomes quieter and the walk is stiff, unsteady, and swaying, showing that the final paralysis is coming on. Loss of flesh is extremely rapid, and even during the short course of the disease the animal becomes exceedingly emaciated. The temperature is never elevated, but usually remains about normal or even subnormal. Finally there is complete paralysis of the hind quarters, the animal being unable to rise, and, but for irregular convulsive movements, lies in a comatose condition and dies usually in from four to six days after the appearance of the first symptoms.

#### **RABIES IN CATS**

When the disease attacks cats, these animals generally hide themselves under the furniture or in some dark hidden corner, and there they may die unobserved in the course of a day or two. As a rule, however, the disease implies danger for human beings. The rabid cat becomes very bellicose; from the dark corner where it has hidden itself it will suddenly attack animals or persons, and especially when children are involved it will jump up to the face and inflict severe wounds with its teeth and claws. In the violence of this attack it fre-



quently bites itself. The rabid cat loses its voice, being able only to mew hoarsely. Later it loses its appetite, has difficulty in swallowing, becomes emaciated, and succumbs within several days with symptoms of paralysis.

Horses, sheep, goats, hogs, chickens and animals of prey such as wolves, foxes, badgers, and martens also contract rabies when bitten by rabid animals, and behave quite similarly to rabid dogs, cattle and cats.

Of all preventable diseases there is not one any more susceptible to a speedy and effective control and eradication than is rabies. With the inauguration and continued energetic prosecution of two very simple and widely enforced measures, rabies, the most terrible and the most fatal of all diseases, to which human flesh is heir, would in a few years become a forgotten horror, a mere matter of passing medical curiosity.

In view of the ease with which the elimination of rabies could be effected, its continued prevalence with the resultant waste of domestic animals, the prolonged menace to the life and health of our own people, the needless expense of treatment, the unnecessary mental anguish of those who through no fault of their own become temporary victims of rabid canines, constitutes a crime against the integrity of the State, in defence of which not even the suggestion of an excuse can be offered. In our too sentimental attachment to the "poor man's friend" we have thoughtlessly unleashed a source of potential danger to the public at large.

Again in many highly regrettable instances the old time mandate of "love me love my dog" has been carried far beyond the dictates of common sense. Ancient and dignified conceptions of the responsibilities of life have been set aside with the characteristic thoughtlessness and abandon of irresponsible youth. A Pekingese dog often replaces the baby in the home. The maternal knee at which Willie was accustomed in sleepy tones to sing out his "Now I lay me down," is too frequently the repository of a fuzzy, grinning poodle. Quite often little Johnnie appears lonely and off goes a solicitous parent to the kennels to buy him a dog for company. And so before the young and plastic mind is thrust in the life and habits of his pet a daily exhibition of filthy practice and sanitary disregard which is unequalled in the whole world. All about the country there is an ever-increasing accumulation of unnecessary and entirely useless dogs for whose existence there is no justification other than the gratification of a foolish fad or misguided fancy, yet each constitutes in itself an increasing source of danger.

The first measure for the control of rabies is the immediate and continued *destruction of all ownerless dogs*. This class includes all mongrels, curs, and hounds, and all other dogs not provided with a license tag, collar and effective muzzle. A municipal ordinance should be passed providing for the destruction of ownerless dogs and it should be made the duty of all county and mu-

nicipal police officers to be on the alert and kill every dog not supplied with an approved and effectively applied muzzle.

The second procedure is that of *muzzling*. The measure should be continuously enforced and only abandoned when a sufficient time has elapsed to warrant a feeling that the disease has been eradicated. Attention has been paid to the fallacy of only applying muzzles during the warm months. In Florida the muzzle should be worn the year around. Care should be exercised in drafting the muzzling ordinance that the type of muzzle be clearly defined, that it is one constructed of metal and one which can be fitted in such a way that biting will be impossible. Such a muzzle should be comfortably adjusted so that the wearing will not be a hardship on the animal.

#### BIBLIOGRAPHY

- Hygienic Laboratory Bulletin No. 65.  
Farmers' Bulletin No. 449—U. S. Dept. Agriculture.  
Pathogenic Microorganisms—Park & Williams.  
Pathology & Therapeutics of the Diseases of Domestic Animals—Hutyra & Marek.

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### RABIES AND THE LABORATORY

There seems to be a very prevalent idea that when a suspected case of rabies occurs the proper course is to kill the animal and send the head to a laboratory for diagnosis. This is far from the truth, however, and, except in those cases where the animal, usually a dog with the furious form of the disease, is making a run over the country and biting whatever gets in his path, the proper way is to confine the animal securely and if he is rabid he will die within a few days, but if he is alive and perfectly normal a week after the bite the best negative diagnosis is secured. On the other hand, when an animal is killed in the early stages of the disease a microscopic examination may fail to give a positive diagnosis.

When it is necessary to kill an animal it should be done by shooting through the heart. Frequently, said to relate, heads are received that have been so treated that there is no material left for examination.

When a head is to be sent for diagnosis it should be put in a pail or similar container with a tight fitting cover, then pack this in a candy bucket or box and fill around with ice and sawdust and ship at such time that it will stay in the express office as short a time as possible. This will get the head to the laboratory in such condition that an examination can be made provided that the brain has not been injured.

When sending a head a letter should always be sent giving a full history of the case—symptoms in animal, duration of same,

if a stray animal, if persons were bitten and if so, extent and location of bite, if animal died or was killed, if there was any history of having been bitten or if other cases have occurred in the locality.

The following cases that have occurred may emphasize the need of always sending a letter by mail as well as the head by express. Last spring a head was received at the laboratory the only means of identification being an express card. Notification was sent to the address, but it was returned as no such man could be found. It was then turned over the health officer, but the sender was never located. Fortunately, this was a negative dog. The other has but recently occurred. One Monday a long distance telephone message was received stating that a dog's head had been sent from a near by city the previous Saturday, it having been sent there by another party from an adjoining county. On Tuesday a head was received from the above mentioned city and examination showed it to be positive and the result was immediately telephoned to the man who had made the previous call telling of the sending of a dog. He had also written that the dog had bitten a boy.

On Thursday another head came from this city bearing the name of the man from the adjoining county. Examination showed this head to be positive also and report was made immediately by telephone, only to find that the last head was the one he had sent the previous Saturday.

Here was an unusual combination. Word that a head had been sent by a third party for shipment from a certain express office. The following day a head came from this office; two days later another head, and the last the one the telephone message and the letter referred to.

No letter was received in regard to the first head, but it was learned that no one had been bitten, hence, fortunately, the delayed report in this instance was not serious. The same week the above case occurred two other heads were received with no letters, one having two names on the box and each from a different town some twenty miles apart. Needless to say, a report was made to both addresses.

Previous to 1903 there was no rapid method of diagnosis, but when Negri announced his findings of the bodies that bear his name, it gave a means whereby the diagnosis could be rapidly made and the finding of the Negri bodies means a positive diagnosis. In the advanced cases in dogs the bodies are quite numerous, especially in the dumb form of rabies, but when an animal is killed in the early stages these may be very few and they may be missed altogether by the microscopic examination even in spite of careful search, and it is sometimes necessary to make animal inoculations, which means a delay of at least three weeks.

Those that have been bitten by a rabid animal should take the anti-rabic treatment, which consists of twenty-five inoculations

of the virus. Possibly the above should be commented on somewhat, as many consider that they need treatment when such is not the case. When the bite from a rabid animal is on an unprotected part and the true skin is broken; also when the saliva has reached a place where the skin is broken, treatment is indicated. When the skin is not broken or if the bite is through several thicknesses of clothing and the clothing is not torn, treatment is not needed.

The means used to protect against the disease rabies was discovered in 1884, by Louis Pasteur, whose name and work will never be forgotten as he was one of the real founders of modern preventive medicine.

The material used for the prevention of rabies is a section of the spinal cord of a rabbit which has been inoculated with a fixed virus, i. e., the material has been carried through rabbits until it produces death on the sixth day. When the rabbit dies the cord is removed under aseptic conditions and is then suspended in a covered container over caustic potash for varying periods of time.

At first the inoculations were begun with a cord that had dried in this manner for fourteen days, then this was followed by cords that had been exposed to this drying method for shorter periods, reducing the period gradually until the animal could be injected with a cord removed the same day with perfect impunity.

The method now most commonly used and known as the Hygienic Laboratory method consists of twenty-five treatments over a period of twenty-one days, starting with a cord that has been dried eight days, and during the course of treatment two doses are given of a cord that has dried but one day. By using gradually increasing strength of the virus the resistance of the body is raised to combat the infection, and the mortality following bites of rabid animals has been greatly reduced. Of those taking treatment the mortality is but a small fraction of one per cent.

The most dangerous bites are those about the face for the reason that the virus travels along the nerve trunks to the brain, and the shorter the distance the shorter the incubation period.

Pasteur had proven in 1884 that animals could be protected from rabies, but on July 6, 1885, the first human test was made. The patient, an Alsatian boy of nine years, Joseph Meister by name, had been attacked by a furious dog two days previously and had received fourteen bites, but fortunately none were on the face. The days during which Meister was taking the treatment were full of anxiety for Pasteur, but the outcome was all that could be desired and the boy was protected. The second patient was treated in October, 1885, with equally good results, and from that time on there was no question but that a preventive treatment for rabies had been found.

The material is prepared for inoculation by grinding in a mortar a bit of the cord spoken of and sterile salt solution is added, as this material must be administered through a hypodermic needle. The inoculations are made into the subcutaneous



tissue of the lower part of the abdomen and do not interfere with the normal life of the individual.

When it is realized how needless it is to have cases of rabies it is strange that an enlightened people will allow animals, to say nothing of human beings, to be exposed to the attack of a rabid dog. Will you help to eradicate this disease?

## The Control of Venereal Disease

For the purpose of organizing a nation-wide control of the venereal diseases the following telegram, letter, and memorandum were sent on January 2, 1918, to the health officers of all the States:

### TELEGRAM

Control venereal infections in connection prosecution of the war constitutes most important sanitary problem now confronting public-health authorities of United States. Plan of control mailed you today. Request your cooperation forceful enforcement same. Venereal infections should be made reportable and quarantinable means of diagnosis and cure should be provided. Campaign wisely conducted publicly should be launched. Please inform me your action in premises.

BLUE,

*Surgeon General, United States Public Health Service.*

### LETTER

SIR: My telegram of this date as follows is hereby confirmed:

Control venereal infections in connection prosecution of the war constitutes most important sanitary problem now confronting public health authorities of United States. Plan of control mailed you today. Request your co-operation, forceful enforcement same. Venereal infections should be made reportable and quarantinable; means of diagnosis and cure should be provided. Campaign wisely conducted publicly should be launched. Please inform me your action in premises.

It is evident that the prevention of venereal infections in the military population is largely dependent on the degree with which these infections are prevented in the civil community. This imposes upon the civil health authorities the duty of forcefully attacking the venereal problem upon the basis of the control of communicable diseases.

There is forwarded you herewith an outline upon which it is proposed to make this attack. Manifestly, no plan which can be set forth at the present time can be complete in all its details nor can a plan be devised which in all its phases fits the requirements of each State exactly. Therefore, in the plan which I am send-



ing you only the basic necessities have been stressed. Your co-operation in putting this plan in force is requested.

The Public Health Service in cooperation with the Red Cross and the Medical Department of the Army is establishing venereal clinics in cities in immediate contiguity to the Army cantonments. There is even greater need for the beginning of an active anti-venereal campaign in those cities which are outside of the military zones but into which soldiers go in search of recreation. Most important of all, perhaps, is the thorough education of the general public to the end that this disease group will be considered in the same light as are the other communicable infections. This will permit the free and frank discussion of this important question without offense to modesty.

I shall be pleased to have your views and suggestions as to the prosecution of further work along these lines. Whatever is to be done must be initiated promptly if we are to prevent the net increment of the draft from having the high venereal rate of the last.

Respectfully,

RUPERT BLUE,  
*Surgeon General.*

#### MEMORANDUM RELATIVE TO THE CONTROL OF THE VENEREAL DISEASES.

##### MEMORANDUM

#### 1. Epidemiology.

- (a) Peculiar to the human species.
- (b) Chronic diseases.
- (c) Spread by contact—not necessarily sex contact—chronic carriers..
- (d) Very prevalent in all classes of society.
- (e) Most prevalent in classes of low inhibition.

#### 2. Control.

- (a) Depends upon the control of infected persons.
- (b) Control of infected persons depends upon knowledge of their whereabouts.

This may be determined by:

- (1) Morbidity reports by serial number (in the case of private practitioners), name to be disclosed when infectious persons cease treatment. Case then followed up by health department which enforces quarantine act.
- (2) Morbidity reports from venereal clinic and hospital.
- (3) Legal enactment necessary to secure morbidity reports.
- (4) Enact and enforce ordinance requiring pharmacists to keep record (open at all times to health department) of sales of drugs for the prevention and treatment of gonorrhea and syphilis.
- (c) Object of this control is to prevent contact between infected and non-infected persons.
- (d) May be obtained by:
  - (1) Quarantine of infected persons.
  - (2) Cure of infected persons.
  - (3) Education of general public to avoid direct and indirect contact with persons infected or presumably infected.

#### 3. Quarantine of infected persons.

- (a) Those who desire cure and can afford treatment.

- (1) These are instructed by their physicians and theoretically are thus quarantined.
- (b) Those who desire cure and cannot afford treatment.
  - (1) Means should be provided for the free treatment of this group.
    - (a) Accurate diagnosis.
    - (b) Dispensary relief.
    - (c) Hospital relief.
- (c) Those who are careless or willful in the distribution of these infections through promiscuity.
  - (1) These for the most part are the ignorant or the criminal classes. Careful physical examination of all persons entering jails or other public institutions, those found infected to be isolated either in a special hospital or under a probation officer who enforces dispensary relief.

#### 4. Cure of infected persons.

- (a) Establishment of venereal clinics by health authorities.
  - (1) Federal, in zones in close contiguity to cantonments.
  - (2) State, in situations where local authorities refuse or fail to establish clinic.
  - (3) City, particularly those cities in which commercialized or clandestine prostitution flourishes for the patronage of soldiers but are beyond the authority of the Secretary of War.
  - (4) Country, in thickly settled rural communities.
- (b) By the creation of new or the utilization of existing hospital facilities.
  - (1) For the treatment of those who volunteer for treatment.
  - (2) For the obligatory treatment of persons under control of the courts.
- (c) By legal enactment.
  - (1) Declaring the venereal infections to be quarantinable.
  - (2) By substituting confinement to hospital for confinement to jail in the case of those convicted by courts and having venereal infections.
  - (3) By substituting remanding to a probation officer for the imposition of fines.
  - (4) To carry out 2 and 3 it is necessary that all persons arrested be examined by the city physician or other authorized person.
  - (5) By arrest of acknowledged and clandestine prostitutes by police-women.

#### 5. Public education.

- (a) Relieve problem of all moral and social issues and place campaign solely on basis of control of communicable disease.
- (b) Propaganda of wisely conducted publicity.
  - (1) Through public meetings addressed by forceful speakers.
  - (2) Through public prints.
  - (3) By placarding public toilets, placards to emphasize danger of venereal diseases and to recommend prompt treatment either by competent physician or at the free venereal clinic.
  - (4) By follow-up work by social workers.
  - (5) By the education of infected persons.
    - (a) By physicians in private practice.
    - (b) By venereal clinic and hospital.

—Public Health Reports, January 4, 1918.

Statement to The Council of National Defense Relative to  
RESPONSIBILITY OF STATES  
for  
VENEREAL DISEASES IN THE ARMY

1. During the twelve weeks ending December 7, 1917, there were reported from 31 cantonments 21,742 new cases of venereal disease. The incapacitation of these men involves not only loss of time; in addition, it has cost the Government to keep them during the period of hospital confinement (which varies from one to eight weeks) more money than is required to maintain the entire command at Camp Dix (the cantonment in New Jersey with 20,859 men), plus an additional sum for medical treatment.

2. This is not all. Inevitably the disease will relapse in hundreds of these cases, in many instances after the men have been transported to France and presumably put into condition for service at the front, at a cost to the nation of probably \$1,500 for each man.

3. The important fact in this connection is that a large proportion of venereal disease cases originate, not in the camp or in communities surrounding the camp, but in cities and towns from which the men come and through which they pass on the way to camp. Reports from the Surgeon General's Office show this. (See graph). The enormous cost to the Government on account of venereal disease is due largely, therefore, to conditions in civil life.

4. A study of the above facts shows an urgent need for an organized attack simultaneously by all States on the problem of venereal disease. When only a few States deal with the problem spasmodically, the result is to drive the principal carriers (prostitutes) from one State to another. State Boards of Health in each State, therefore, should now enlist the cooperation of State Councils of Defense, governors, mayors, chiefs of police, police judges, district attorneys, city attorneys, superintendents of hospitals and educators in an organized attack on these diseases.

## Sanitation of Civil Zones Surrounding Aviation Camps Near Arcadia, Florida

BY

GEORGE W. SIMONS, JR., *Sanitary Engineer*

As soon as it was definitely announced that the government would establish two aviation training camps on the extensive prairie land to the east and southeast of Arcadia, Florida, the State Board of Health, in cooperation with the several city councils within the hereinafter defined civil zone, took immediate steps to assume charge of the sanitation and the control of the communicable diseases within the zone surrounding the specified government reservations. Before any construction work had been commenced at either camp, District Health Officer A. C. Hamblin, M. D., was on the ground to make a hasty preliminary survey of the public health necessities occasioned by the sudden advent of numerous laborers and transients into a sparsely settled area and small town, and further to make himself familiar with existing conditions.

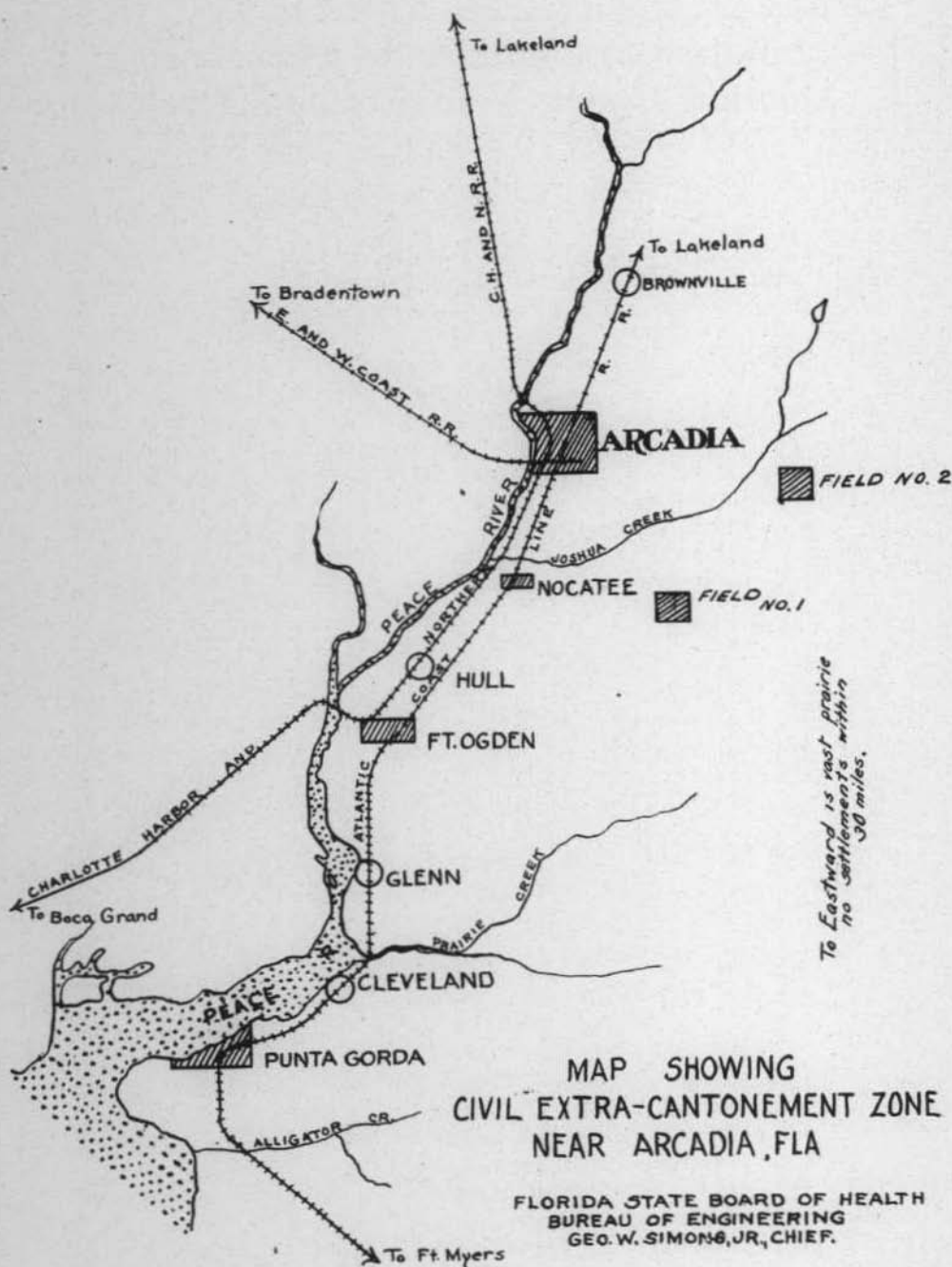
Later, when work was partially under way at Field No 1 (Carlstrom Field), and before any construction work had been commenced at Field No. 2 (Dorr Field), the State Board of Health inaugurated an intensive survey of the city of Arcadia, upon the completion of which offered to the city council assembled such suggestions, advice and ordinances for adoption as were deemed necessary to handle the situation without delay. Similar surveys will also be conducted at every other point located in the established civil zone. This survey of the State Board of Health consists of the following investigations:

1. House to house canvass to note:

- (a) general and ordinary sanitary environment.
- (b) presence of absence of window and door screens.
- (c) presence of manure accumulations and how kept.
- (d) whether house was available to city sewerage and whether or not it was connected.
- (e) presence and conditions of privies in unsewered areas, also proximity of such areas to sewerage.
- (f) whether house was supplied with city water and if not, the supply used.
- (g) source and physical conditions of private water supplies.

2. Investigation and condemnation of open privies and immediate notification of such action through newspapers.

3. Investigation of all restaurants, lunch rooms and eating houses to note conditions and placing the proprietor of same on





record for appearance in court upon non-compliance with orders.

4. Investigation of dairies.
5. Investigation of meat markets and grocery establishments.
6. Investigation of municipal refuse collection and disposal.
7. Investigation of drug stores and other places where soft drinks are sold.

8. Thorough review of all existing ordinances as affecting public health and recommendations for new ones.

#### CIVIL EXTRA—CANTONMENT ZONE

The aviation fields, Carlstrom Field and Dorr Field, are being established about eight and five miles, respectively, from the business center of Arcadia, on extensive flat prairie lands east and southeast of the city, and about two and five miles, respectively, east and northeast of the small town Nocatee. The civil extra cantonment zone is shown on the accompanying map, as arbitrarily defined by the State Board of Health. It is difficult to assign definite limitations to such a civil zone because the entire rural territory in the vicinity of the camps is sparsely settled, towns are few and small and the civil divisions exceptionally large. DeSoto County, of which Arcadia is the county seat, is typical of the entire zone, as regards population and area. This county has a land area of 3,754 square miles and in 1915 a population of approximately 22,000, or only 5.9 people per square mile. Moreover, about one-quarter of this population is in Arcadia. If some civil divisions (as Lee, Polk and DeSoto counties) were to be included wholly within the civil extra cantonment zone, cities and towns remote from Arcadia and very inaccessible would be unnecessarily included. Consequently, after due consideration the zone was arbitrarily defined as shown on the accompanying map, and if at any time it is thought necessary and advisable to enlarge the zone the same can be readily done.

From the map it will be noted that the civil zone as defined by the State Board of Health is a long, narrow one, being approximately 30 miles long by 12-15 miles wide. To the west the zone is bounded by the Pearce River, on the east by the sparsely settled prairie land extending to the Everglades and the Lake Okeechobee region, on the north by the country in the vicinity of and including Brownville, on the south by Charlotte Harbor and the Atlantic Coast Line Railroad from Punta Gorda to Fort Myers.

The main point of contact in the defined zone and the central point from which all supplies and men proceed to the camps is Arcadia. From here a branch railroad has been recently constructed, serving both camp sites. Consequently, the hardest and most intensive sanitary work is being prosecuted in Arcadia, yet similar and no less intensive campaigns are to be executed in each of the other points of contact shown on the map, namely, Brownville, Nocatee, Hull, Fort Ogden, Glenn, Cleveland and Punta Gorda. Inasmuch as automobile lines are being operated

or contemplated between all points south of Arcadia and the camp sites, it is considered that all such towns are vital points of contact such as Arcadia, because men will be attracted to these places at different times. Punta Gorda, for instance, having excellent hotel facilities and fishing grounds, will be attractions for many men from camps.

As previously stated, Arcadia is the main gateway or entrance to the two camp sites and from here all supplies and labor are distributed. Thus it can be easily seen how the sudden increase in population, coincident with the camp establishment, causes new public health problems to arise, problems which have never confronted the area previously. This sudden influx of people has enlarged the dairy business, has added four lunch rooms to the city and further affected it in other ways.

The city is located on the Lakeland-Fort Myers division of the Atlantic Coast Line Railroad, the Charlotte Harbor and Northern from Lakeland to Boca Grande and the East and West Coast Railway from Bradentown west to Arcadia, which is the terminus. The first two railroads make direct connections at Lakeland for north-bound trains to Jacksonville.

Arcadia was incorporated as a city in 1901, at a time when its total population was approximately 800. Since 1901 the city has experienced a steady and substantial growth as shown by the following figures:

1900.....	799	(Federal census)
1910.....	1736	(Federal census)
1915.....	3504	(State census)
1916.....	3843	(Estimated)
1917.....	4182	(Estimated)

The present population of Arcadia, under normal conditions, is about 4000, of which number 1000 are colored.

Following the announcement of the government plans to establish camps near Arcadia the rate of growth was abnormal and rapid, due to the sudden and great influx of laborers and transients attracted to the city.

#### EXISTING HEALTH LAWS

In March, 1914, the city council assembled in a special session, passed an ordinance "creating and establishing the Board of Public Health for the City of Arcadia, defining its powers and duties and providing penalties for violating said ordinances." This ordinance provides for the personnel of the Board of Health, which shall consist of five members, as follows: the Mayor, the President of the Council, the Chief of Police, the Chairman of the Sanitary Committee and the City Physician or Health Officer, and shall hold meetings once monthly. The ordinance further provides that "The Board of Health of the City of Arcadia shall have the authority to make and formulate such rules and regulations

as they may deem best for governing their Board and for the preservation of the health of the City of Arcadia, and for the prevention of contagious diseases and the spread of contagious diseases." The additional provisions of the ordinance are fully enough specified to give the Board ample powers to cope with any situation confronting it. In fact, the ordinance is slightly too comprehensive in the specification of duties for the city health officer, who is only a part time employee appointed by the Mayor and confirmed by the Council.

In addition to the above ordinance creating a Board of Health and specifying its several duties and powers, the City Council has from time to time passed health ordinances proposed by the State Board of Health. Among the latter are ordinances requiring sewer connections within 150 feet of any sewer line, and further providing for the screening of places where food is prepared, manufactured, kept, sold or eaten—also providing for the screening and protection of such food against fly contamination.

#### EXISTING SANITARY CONDITIONS

In the Introduction will be found a brief outline of the sanitary investigation work as conducted by the State Board of Health to ascertain the actual status of existing conditions at Arcadia.

Considering that the sewerage disposal problem was the most stupendous one, and realizing also the relations existing between manure accumulations, fly germination, open privies and intestinal infections, it was thought advisable to make a detailed canvass of all houses located within or accessible to the sewerage and water districts in order, first, to note how many houses were not connected with the sewerage system, water system or both, and, secondly, to note the actual conditions surrounding each house, as to screening of windows, doors, kitchens, presence of barns, manure accumulations, cow or pig lots, etc. In this house to house survey the negro quarters were excluded, inasmuch as an independent investigation was conducted in this district and as a result it was wholly condemned, especially because of the presence of about 500 open, filthy, unsanitary privies. This latter district is located without the sewered area. A house card as follows was used:

House No. .... County.....  
 .....Vot. Pct.....  
 .....City or Town.....

#### HOUSE RECORD.

Name of Tenant.....  
 Name of Owner or Agent.....  
 Address.....  
 Construction.....No. Stories.....  
 (Brick, cement, wood)  
 No. of Rooms.....No. of Occupants, M..... F.....  
 Screening .....

Approximate Size of Lot.....	
Water Supply .....	(City, Cistern, Well (Kind) )
Sewage disposal .....	(Sewage connection, Septic tank, Cesspool, Privy)
If privy .....	(Kind and Condition)
Distance between water supply and privy or cesspool.....	
Kind of soil.....	Slope.....
Garbage Disposal .....	
Stable, cow lot, or chicken yard.....	
Care of manure.....	
Remarks *.....	
.....	
.....	
.....	

\*—Note cleanliness of premises and presence of flies in house.

The house to house survey (286 houses), exclusive of the colored district, gave the following results:

- (1) *Sewage Disposal*:
 

Houses connected with city sewerage.....	184
Houses in sewer area, yet maintaining open privies.....	98
Cess pools .....	2
- (2) *Water Supply*:
 

Houses having city water connections.....	205
Houses used shallow wells (poor).....	74
Private deep well supplies.....	3
Metallic rain water cistern supplies.....	7
- (3) *Screening of Houses*:
 

No windows or doors screened.....	62 houses
Partially screened .....	10 houses
Houses well screened.....	210 houses
- (4) *Care of Manure*:
 

Barns cleaned regularly and manure removed.....	10
Barns cleaned regularly, manure hauled for fertilizer.....	22
Barns having manure thrown carelessly around barnyard....	8
Barns having no manure around.....	235
Barns leaving manure at barn.....	5
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The above results of the house survey imparted the following information and clearly specified the need for remedying conditions:

- (1) That there were within the sewerage district, which comprises 85% of the incorporated area, a number of houses (98) accessible to but not connected with the sewer system. These houses were, for the most part, using the open privy as a means of sewage disposal in preference to the municipal sewerage system.



The enforcement of the city ordinance relative to sewer connections can readily handle this situation and thus eliminate the open privies now used.

(2) That a number of houses (74) were deriving their drinking water supplies from shallow driven wells, obtaining water in many instances of a potentially dangerous quality. Practically all these houses are accessible to water connections, but the occupants prefer the shallow well supplies to the hard sulphur water furnished by the city.

(3) That manure is not properly cared for and allowed to remain in exposed piles, germinating flies at a constantly favorable temperature.

In addition to the carelessly deposited manure accumulations in the residence district, there are several public stables and hitching lots in close proximity to eating places and stores, allowing manure accumulations to remain exposed and unprotected.

(4) That no specified rules have been offered at any previous time relative to the retention of garbage and wastes at the households. Uncovered, leaking, wood pails and boxes were common everywhere, attracting privy flies directly to the kitchens.

(5) That most of the houses were well screened against the admission of flies.

(6) In the colored quarters, located compactly in the southwest portion of the city, the sanitary conditions are bad. The houses are wholly unscreened as a rule, the privies are wide open and filthy, the water supplies for most part are derived from shallow wells. Furthermore, in this district are found a number of low ground depressions and ditches filled continuously with water, favorable to the breeding of mosquitoes, which should be drained immediately. In this district there are approximately 500 filthy, open privies.

Following the house and negro quarters survey, an investigation of all restaurants, lunch rooms, grocery stores, bakeries and markets was undertaken.

#### RESTAURANTS AND LUNCH ROOMS

There are at present eleven (11) restaurants operating in Arcadia, all in a comparatively unsanitary condition. Pies, cakes and cooked foods are being carelessly exposed on the counters and in direct violation to the city ordinances regulating the screening of such foodstuffs, and in most instances kitchens are crowded, dark and unclean. The present increase and pressure of trade with the available supply of utensils does not permit a proper washing of same. Garbage is badly kept at each place and windows and doors only fairly well protected with screening. There are one or two exceptions, however, to the above.

#### GROCERIES, MARKETS AND BAKERIES

The groceries particularly present an excellent condition—all raw foods, as lettuce, celery, cabbage, etc., to be eaten without



further preparation are properly screened in tight compartments away from fly, hand or dog contamination. The eleven (11) grocery stores are in a good sanitary condition, and with one or two exceptions observe the screening laws. The five (5) meat markets are modern and kept most of the products in iced glass cases. In one or two establishments screened compartments must needs be installed. There are at present two (2) bakeries, one of which is in a good condition, furnishing a wrapped loaf to all customers and in other ways observes sanitary precautions. The other bakery is only partially screened.

#### DAIRIES

Two (2) dairy establishments are now furnishing milk to Arcadia, one of which is in a fair sanitary condition, the other in a very unsanitary condition. Both dairies are located about one and one-half miles from the business district.

Dairy A has a new, clean, light and well ventilated 20-stall milking bond with a well laid wood floor on which the cows stand while milking. The floor is thoroughly cleaned after each milking. At one end of the milking barn is a tightly wire screened and clean bottling room. The barnyard surroundings present a cleanly and neat appearance, all manure being carted away to the fields daily and there being no privies near. As soon as cows are milked they are turned to pasture and the barn swept clean. Previous to milking the cows teats are washed and wiped with clean cloths, but the milkers do not attire in very clean suits or observe very cleanly and neat personal appearances. All utensils and bottles are thoroughly washed before using but not sterilized. Milk is cooled after taken from the cow, bottled and delivered to town and the consumers direct. A sanitary pail with a small screened open through which milk passes during milking is used. None of the cattle are tuberculin tested. This particular dairyman expects soon to install a steam sterilization plant for all bottles and utensils.

Dairy B. The open milking barn equipped with twenty stalls presents a very uncleanly, unsanitary appearance, the wood floors are dirty as all the surroundings. All milking is practically done in the open with only top and end shelters. The milkers used ordinary open twelve-quart pails, and they themselves do not present a very clean personal appearance. Within twenty feet of the open milking barn was deposited a large accumulation of cow dung and the surrounding yard was furthermore unclean. Also within twenty-five feet of the milking barn and within thirty feet of the manure accumulation was a large, double open back, filthy privy. Located in a separate building about 200 feet from the milking barn, screened with mosquito netting, was the bottling house. The bottles are all well washed, treated with a B. K. mixture, and dried previous to receiving milk. Bottle caps are kept in an open box. The milk after bottling is delivered direct

to consumers. Dairy A and B secure their total supply from 41 cows. These two dairies supply practically the the milk now used in Arcadia. There are some family cows about the city supplying one or two additional families, but the number is not great.

#### WATER SUPPLY

The municipal water supply at Arcadia is derived from two deep drilled wells sunk 260 and 530 feet deep into the Vicksburgian limestone water bearing stratum. The former well is of a 6-inch diameter and the latter of an 8-inch—each cased with steel to rock. The wells, pumping equipment, elevated tank and reserve are located four blocks north of the business portion of the city near the A. C. L. right of way.

The water possesses a very perceptible hydrogen sulphide odor and taste characteristic of waters from this locality. The gas at times reacts upon the iron mains at dead ends, giving rise to the very objectionable and so-called "black water." The bacteriological examinations conducted in the laboratory of the State Board of Health during the past two years indicate that the water is always free from contamination and of a fit quality for domestic consumption.

#### SEWERAGE AND SEWAGE DISPOSAL

The present sewerage system of Arcadia is comprised of two portions, an old and a new, the former being installed in 1911, the latter during 1914. The system covers the city as a whole—practically everything north of Pine Street—although there are outlying portions inaccessible, also a large portion of the negro quarters.

All lines are of vitrified glazed tile, varying in size from eight to eighteen inches at the outfall. All house connections are of four inch. At all dead ends are located flush tanks, 29 in all.

The sewage disposal for the City of Arcadia is by dilution in the Peace River about two miles west of the city.

As stated elsewhere, the privy problem is the momentous one confronting Arcadia and one which demands immediate attention. At present there are about 600 open privies, some of which are accessible to sewerage.

At the conclusion of the sanitary survey a meeting of the City Council was convened for the purpose of discussing the data collected. The conditions as found were imparted to the assembled body of councilmen and the following recommendation was immediately acted upon:

- (1) That additional ordinances be passed to immediately
  - (a)—Condemn all open privies and further require that all property owners shall at once proceed to remodel or reconstruct their privies in accordance with plans offered by the State Board of Health.
  - (b)—To eliminate all possible places where water may collect, stagnate and act as mosquito breeders. This ordinance shall apply to old pails, cans, boxes, barrels as well as ditches, pools, etc.

- (c)—To abandon the use of the common towel and drinking cup.
- (d)—To regulate the production and bottling of all milk sold within the corporate limits of the city.
- (e)—To prescribe a regulation, standard size, metallic garbage can, and further specify a place where same may be found by the collector.
- (f)—To eliminate the careless depositing of manure accumulations and providing for the screening of stables, etc.

Other recommendations offered by the State Board of Health for the bettering of conditions are:

- (2) That all ordinances on the statute books at the present time must be immediately enforced, namely those relative to sewer connections and screening of foodstuffs.
- (3) That water lines be extended to outlying districts where sewer lines are now available so as to permit such properties to connect with sewers.
- (4) That a public convenience station be located near to the business portion of the city for the use of transients and others.
- (5) That a full time sanitary officer be appointed without delay whose duty it will be to constantly inspect and rigidly enforce all health ordinances now on the books and those to be passed. This sanitary inspector shall have full police powers.
- (6) That in the future there shall be an absolute prohibition of the sale of all foodstuffs in any manner or form from carts, wagons, stands or other temporary or improvised arrangements. All restaurants, lunch rooms and eating houses must be suitably housed, properly equipped with utensils to maintain sanitary conditions.

At the council meeting referred to above, without any difficulty and at the earnest request of the State Board of Health, the City Council passed the following ordinances, also assented to the appointment of a full time sanitary officer to enforce all ordinances pertaining to the public health. The council further agreed to pass, at any time the State Board of Health deems necessary, such other ordinances as are requested. The work and progress at Arcadia and the remainder of the zone will be at all times under the careful watch of a State representative, who will be available to each town at a moment's notice.

#### AN ORDINANCE

Providing for the Disposal of Human Excreta Within the City Limits of the City of Arcadia, and Declaring Open Privies to be a Nuisance, and Providing for the Abatement of Such Nuisances.

Article 1. Providing for the sanitary method of disposing of human excreta of occupants and owners of premises.

Section 1. That every residence and building in which human beings reside, are employed or congregated, shall be required to have a sanitary method for the disposal of human excreta, namely: either a sanitary water closet that is connected according to ordinance with the city sewer or a sanitary privy.

Section 2. It shall be unlawful to dispose of any human excreta within the corporate limits of Arcadia, Florida, except in a sanitary water closet or a sanitary privy.

Section 3. It shall be unlawful for any person or persons, firm or corporation owning or leasing any premises in the City of Arcadia, to permit the disposal of any human excreta on any property owned, leased or rented by such person or persons, firm or corporation or the agent of such, except in a sanitary water closet or sanitary privy, and it shall be unlawful to permit the

disposal of any material in a sanitary privy other than human excreta and paper.

Section 4. That no cesspool shall be built or maintained in the corporate limits of Arcadia, Florida.

Section 5. That no septic tanks shall be constructed within the limits of Arcadia, Florida, without a permit from the Board of Health.

#### ARTICLE V.

Section 1. That any person or persons, firm or corporation, or agent of any person or persons, firm or corporation, who neglects, fails or refuses to comply with any of the provisions of this ordinance shall be deemed guilty of a misdemeanor and when convicted shall be fined in the sum of not less than \$5.00 or more than \$50.00, and each time that such person or persons, firm or corporation neglects or refuses to comply with any of the provisions of this ordinance shall be deemed a separate offense and punished as therein provided.

Passed in regular session this, the 7th day of January A. D., 1918.

.....  
President.

#### AN ORDINANCE

To Prevent the Breeding of Mosquitoes in the City of Arcadia.

Be it ordained by the Mayor and City Council of the City of Arcadia.

Section 1. It shall be unlawful to maintain any vacant lot or other premises within the municipality of Arcadia on which the rubbish is allowed to accumulate, weeds or long grass is allowed to grow, or any water is allowed to collect and lie stagnant, in which mosquitoes breed, or are likely to breed, any any such premises or vacant lot on which such rubbish, weeds, long grass, or any stagnant water is allowed to remain is hereby declared a nuisance and dangerous to the health of the people of the City of Arcadia.

Section 2. The collections of water referred to in Section 1 of this ordinance shall be held to be those contained in ditches, ponds, pools, excavations, holes, depressions, open cesspools, privy vaults, fountains, cisterns, tanks, shallow wells, barrels, troughs, except horse troughs in frequent use, caves, troughs, urns, cans, boxes, bottles, tubs, buckets or other similar containers.

Section 3. The method of treatment of the collection of water specified in section 2, so as to prevent the breeding of mosquitoes, shall be any one or more of the following: (a) Screening with wire netting of at least 16 mesh to the inch each way or any other material which would prevent the ingress or egress of mosquitoes; (b) complete emptying every seven days of the unscreened containers; (c) using a larvicide approved by and applied under the direction of the health department;; (d) covering completely every seven days the surface of the water with paraffin oil, kerosene or petroleum in sufficient quantities to remain covered at least 12 hours each time; (e) cleaning and keeping sufficiently free from vegetable growth and other obstruction, and stocking with mosquito-destroying fish, absence of half-grown or larger mosquito larvae to be evidence of compliance with this measure; (f) filling or draining to the satisfaction of the health department; (g) the removal of tin cans, tin boxes, broken or empty bottles, and similar articles likely to hold water, at least once in seven days. If not removed, it must be completely destroyed as not to be able to hold water.

Section 4. The natural presence of mosquito larvae in standing or running water shall be evidence that mosquitoes are breeding there, and failure to prevent such breeding within 24 hours of such reasonable period as may be specified in writing by the health department shall be deemed a violation of this ordinance and regulation.

Section 5. Should a person or persons responsible for conditions giving rise to the breeding of mosquitoes fail or refuse to take necessary measures to prevent the same within 25 hours or such reasonable period, as may be specified in writing by the health department is hereby authorized to do so, and all



necessary costs incurred by the health department shall be charged against the property owner or other person offending as the case may be.

Section 6. The health department shall enforce the provisions of this ordinance and for this purpose may at all reasonable times enter in and upon any premises within its jurisdiction, and any person or persons charged with any of the duties imposed by this ordinance failing within the time specified by the health department to comply with any order thereof to comply with this ordinance, shall be deemed guilty of a violation, and each day after the expiration of this time that said person fails to comply with this order shall be deemed a separate offense of this ordinance.

Section 7. The owner of the premises, and in his absence the agent or occupant, shall be held under this ordinance to be responsible for the prevention or correction of conditions giving rise to breeding of mosquitoes or likely to give rise to the breeding of mosquitoes; PROVIDED any tenant, trespasser or other person causing said condition without the consent of the owner or agent shall be held responsible therefor.

Section 8. Any person violating or assisting in the violation of any part or parts of this ordinance shall, upon conviction, be fined not less than \$5.00 and not more than \$25.00.

This ordinance shall go into effect immediately upon its passage any approval by the mayor.

Passed in regular session this, the 7th day of January, 1918.

President of the Council.

#### AN ORDINANCE

Prohibiting the Use of Common Drinking Cups and Common Towels in the Public Places in the City of Arcadia.

Be it ordained by the Mayor and City Council of the City of Arcadia.

Section 1. It shall be unlawful to expose, keep, provide, permit any drinking vessel to be used in common in any public, private or parochial school, or Sunday school, hotel, lodging house, boarding house, restaurant, depot station, waiting room, boat, store, factory, hall, theatre, moving picture house, library, public institution, street, park, or any other public place in the City of Arcadia.

Section 2. No glass, dish, cup, spoon, measure or other eating or drinking vessel or utensil, used in or at any hotel, restaurant, drug store, soda fountain, or other place of public refreshment in the City of Arcadia shall be offered or permitted to be used by any other patron unless it has been thoroughly cleansed since it was last used, and is thoroughly clean at the time that it is offered for use.

Section 3. No person, firm or corporation having the management or control of any factory, department store, or other business establishment, school, hotel, theatre, concert hall, restaurant, cafe, public lavatory, or wash room, shall maintain therein or thereat any towel or towels for use in common.

Section 4. The term "common" is hereby defined as more than one person.

Section 5. Any person or corporation violating the provisions of this ordinance shall be fined not less than \$1.00 nor more than \$10.00, and each day's violation shall constitute a separate offense.

Section 6. This ordinance shall take effect immediately upon its passage and approval.

Passed in regular session this, the 7th day of January, A. D., 1918.

President Pro Tem of City Council.

#### AN ORDINANCE

Be it Enacted by the Board of Health of the City of Arcadia as follows:

The term "milk establishment" or "establishment," as hereinafter used, shall be held to include any and every building, or part of a building, wherever located, in which milk is bottled for sale or distribution in the City of Arcadia.



The term "bottling room" shall be held to apply to any room or part of a building in which milk is exposed or bottled, and the term "washing room" to any room or part of a building in which any containers, apparatus or utensils used in the handling of milk are cleansed or otherwise treated. The following rules shall apply to all such milk bottling establishments; and no milk which has been bottled, handled or stored in non-compliance with or violation of any of said rules shall be sold, held or offered for sale, or delivered in the City of Arcadia under a penalty of \$25.00 for each and every offense.

1. No such establishment shall be located within 100 feet of any hog pen, manure pile, privy, vault or other source of contamination.

2. Water used for washing bottles and utensils shall be obtained from a source subject to approval by this board.

3. Every privy located on any premises where milk is bottled shall be so constructed that the contents shall be inaccessible to flies, and every such privy shall be kept at all times in a sanitary condition.

4. Bottling and washing rooms shall conform to the following requirements:

(a) Floor to be water-tight, constructed of cement, concrete or other non-absorbent material, and properly drained to a point or points at which drainage is disposed of.

(b) Walls and ceilings to be smooth and kept well painted.

(c) Adequate natural or artificial light to be provided.

(d) Adequate ventilation to be provided.

(e) Rooms to be thoroughly screened with wire against flies.

5. Drainage shall not be permitted to flow into or upon the ground underneath the establishment or within 100 feet of the same. If drainage is collected in a cesspool or other receptacle, the same shall be water-tight and shall be kept in a sanitary condition.

6. Non-employees shall be excluded at all times from bottling and washing room.

7. Milk on reaching the establishment shall be immediately cooled to a temperature not exceeding 50 degrees F. (If such cooling has not already taken place), and shall be thereafter maintained at such a temperature. Cooling tanks should be constructed of smooth, water-tight non-absorbent material and the water in such tanks shall be changed at least once a day during the warm months (May to September, inclusive), and at least twice a week during the remainder of year (October to April, inclusive).

8. Bottles and other containers, apparatus and utensils used in handling milk, shall, after use and before being refilled or reused, be thoroughly cleansed and sterilized.

9. Adequate lavatory facilities for employees shall be provided separate and distinct from apparatus used for handling milk or treating milk utensils. All employees engaged in milking, bottling and washing rooms shall, before beginning work and after visiting the toilet, wash their hands thoroughly with cleanwater and soap.

10. No bottling, washing or milking room shall be used as a living or sleeping room or be directly connected with such room or used for other purposes other than the storage of milk and milk utensils.

11. No person affected with typhoid fever, dysentery, scarlet fever, diphtheria, tuberculosis or any other communicable disease, which may be declared by the State Board of Health to be included in this regulation, shall be employed in any milk bottling or milking establishment; nor shall any member of the family or household of any such person be so employed, unless by permission of this Board.

12. All milk utensils and apparatus shall be of such construction as to be readily cleansed and shall be kept in good repair and free from rust.

13. Bottle caps shall be kept in a clean, dust-proof container.

14. Bottling and washing rooms and all parts thereof shall be kept clean and free from offensive odor. Dirt, dust, rubbish, clothing, all articles not used

in the handling of milk and domestic animals shall not be permitted in such rooms.

15. All employees in milking, bottling and washing rooms shall keep themselves and clothing in a clean condition. Clean aprons or suits used for no other purpose shall be worn by such employees while in the performance of their duties.

16. No spitting or smoking shall be permitted in bottling and washing rooms.

17. A copy of the above rules, furnished by the Board of Health shall be posted in a conspicuous place in each milk-bottling establishment.

18. No milk shall be bottled except in an establishment in which all the foregoing regulations are complied with, and at no time and in no place shall milk be exposed to contamination by dust, dirt, flies, communicable diseases or any other act or thing injurious to health.

#### AN ORDINANCE

An ordinance providing for a permit of the Board of Health for premises used as a stable; Providing for the screening of stables and other buildings; Providing for the removal of manure therefrom; Providing for the sanitation of such building; Providing the accumulation of manure; Regulating the hauling of manure through the streets and imposing a penalty for the violation of the ordinance. Be it ordained by the City Council of the City of Arcadia:

Section 1. No person, association of persons or corporation shall use or operate any premises in the City of Arcadia as a stable where horses, mules or cattle are kept until they first receive a permit from the Board of Health of the City of Arcadia.

Section 2. Any person owning or leasing any stable or other building where any horse, mule or other cattle are kept shall maintain a suitable and sufficient receptacle which must be so constructed and kept as to protect the contents from rain and rats, and to be so screened as to prevent access to flies and all manure from such horse, mule or cattle must be placed in this receptacle.

Section 3. All persons owning or leasing a stable where more than six head of horses, mules or cattle are kept shall have all manure from such animals removed from their premises twice in each week. In no event or circumstances shall any manure be deposited or thrown in any alley, street or public place, or suffered to remain in such place.

Section 4. At no time shall any owner or leasee or occupant of any stable or other building or premises where any horse, mule or other animal be kept allow the manure to accumulate in such quantity or manner so as to become offensive to any part of the neighborhood, or to in any manner so as to become a private or public nuisance.

Section 5. Any owner or leasee of any stable shall at all times keep, or cause to be kept the building in a clean and sanitary condition.

Section 6. No person hauling manure through the streets shall permit the same to litter the streets.

Section 7. Any person violating any part of this ordinance shall, upon conviction, be fined not less than \$10.00 nor more than \$100.00, and each day's continuance of such nuisance or condition mentioned herein shall be a separate offence.

Section 8. All ordinances or parts of ordinances in conflict hereto be and the same are hereby repealed.

Section 9. This ordinance shall take effect immediately upon its passage and approval by the mayor.

Passed in regular session this the 7th day of January, A. D. 1918.

President Pro Tem of City Council.

## AN ORDINANCE

Providing for Suitable Receptacles for the Disposal of Refuse at Households, Stores, Markets, etc.

Be it Ordained by the Mayor and City Council of Arcadia:

Section 1. That all housekeepers and boarding-house keepers, hotel keepers, butchers or storekeepers, or any other person or persons in the City keeping or offering garbage for collection shall provide for the storage of all kitchen and table refuse, offal, swill and every accumulation of animal and vegetable matter that attend the preparation, decay, dealing in, or storage of fish, meats, fowl, game, or vegetables, a water-tight metal receptacle provided with proper handles and a tight fitting cover and to hold not less than twelve gallons. Said cans shall be kept in a place easily accessible to the garbage collector, but never upon any street or sidewalk, alley, or public place; and such receptacle shall be thoroughly cleaned by the owner after it has been emptied by the garbage collector; and shall provide for the storage of all general combustible waste, as paper and rags, pasteboard boxes, berry boxes, whole bottles, broken glass and empty tin, fruit or vegetable cans, a separate receptacle, which shall be kept in a place easily accessible to the garbage collector, but never upon any street or sidewalk, alley or other public place.

Section 2. "Garbage," as used in this ordinance, shall be held to include all kitchen and table refuse, offal, all general combustible waste, as paper and rags, pasteboard boxes, berry boxes, swill and every accumulation of animal and vegetable matter that attend the preparation, decay, dealing in or storage of meats, fish, fowl, game, or vegetables; also whole bottles, broken glass, and empty tin, fruit, or vegetable cans.

Section 3. If any person or persons, firm or corporation shall permit his, her, or its garbage to be so stored or kept in an exposed manner as to render the air or soil impure or unwholesome, such person or persons responsible shall, upon conviction before the burgess of said city or any justice of the peace of the said city, be sentenced to pay a fine of not less than \$1 nor more than \$25 or undergo an imprisonment in the borough lockup for a period of not to exceed forty-eight hours.

Section 4. All laws or parts of laws in conflict herewith are hereby repealed.

This ordinance shall take effect immediately upon its passage and approval by the Mayor.

Passed in regular session this the 7th day of January A. D. 1918.

.....  
President Pro Tem of the City Council.

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COUGHING

A nursing mother with a cold should tie a thin cloth or veil over her mouth and nose while nursing the baby, and should be careful never to cough or sneeze in his face, nor kiss him on the mouth. She should be particularly careful not to use her own handkerchief for the baby, nor sleep with him, while the disease lasts.

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So far as it is known, the question as to which came first, the hen or the egg, has not yet been entirely settled. Neither has the question as to which comes first, the germ or the cold. If the cold comes first, it gives the germ a chance to get in. If the germ comes first, it makes the cold.

## PREVENTION IS BETTER THAN CURE

One of the most successful of our innovations is the medical inspection of school children. Astonishing are the results already achieved. Many a child who has been condemned as stupid or whipped for faults, has been shown to have a pathological basis for its derelictions—it did not get its lessons because it could not hear the teacher or see its books, it was dull from adenoids, intoxicated from pus-foci, handicapped from disease transmitted from ancestry or absorbed from insanitary surroundings, at home or in the school itself.

The number and variety of physical defects revealed by investigation is amazing. Twenty-five per cent of all school children are asserted to have scoliosis; an equal number have bad eyesight; five per cent have defective hearing; three per cent suffer impediments of speech. Some estimate the feeble-minded at four per cent, which would make 800,000 in the country at large, of whom 100,000 are so badly mentally affected as to deserve treatment in institutions.

Yet, school inspection is a very new affair and the medical profession is only beginning to acquire a practical education upon it. The methods and their application still are experimental—then what may not be the results when study and experience have developed them?

Immense as are the benefits to be derived from inspection of the schools and the attending children, this is but a beginning. The place for such work is the home. How much better if every family were under the sanitary supervision of a particular doctor who is paid a salary for doing his uttermost to keep people well. Why wait for the child to fetch to its fellows at school the evils of a bad hygienic environment, a vicious moral environment, in its home?

• There is a certain sense of opposition to the "public doctor," as every man who has acted as vaccine-physician knows; but, every poor family takes a certain pride in "our own doctor" that makes his work as easy as that of the municipal official is hard.

The detection of disease-carriers and their segregation from other children constitutes a great advance; but, far better inspect the home conditions that permitted the development of typhoid fever or diphtheria or dysentery or any other impartable malady. Why run the risk of a child bringing typhus to school with its lice, or plague with its fleas, or why allow a malarial man to infect the mosquitoes and so ruin the health and the sanitary reputation of an entire community?

The cost of the Armageddon would not represent the monetary injury done to the South by its designation as "the malarial belt."

The ticks of the region of the Bitter-Root River ruined the promoters of an irrigation project undertaken by them.—*American Journal of Clinical Medicine.*



P.H.K

HUMAN LIFE IS THE STATE'S GREATEST ASSET

# FLORIDA HEALTH NOTES



## OFFICIAL BULLETIN

PUBLISHED QUARTERLY BY THE

## STATE BOARD OF HEALTH

EDITED BY DR. W. H. COX, STATE HEALTH OFFICER

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Vol XII

TAMPA, FLORIDA, MAY, 1918

No. 12 (New Series)

*"Take things as they are today and proceed  
at once to make them better."*



# FLORIDA HEALTH NOTES

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There were no issues of the Health Notes for the months of March or April, but the serial Number is retained, February being No. 11, and this, the May issue, No. 12.

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**T**HE Laboratories of the State Board of Health have been established for the purpose of giving aid to the people of this State, through physicians, by making investigations and reporting findings which may be of assistance in diagnosing diseases. There is no charge for this service. It is performed gratuitously. Physicians and surgeons in need of laboratory service are earnestly urged to make use of the facilities offered by the laboratories of the State Board of Health of Florida.

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**T**HE value of Health Notes may be greatly increased if physicians and nurses will aid in causing it to be placed in the hands of parents to whom such information as it contains may be useful. Copies will be mailed to any address upon request.

## THE KEY-NOTE

THE KEYNOTE of the State Health Department is the prevention of disease, and the correction of defects—just as with big business the keynote is conservation and efficiency. We read more today, in newspapers and business journals, than ever before, about conservation and efficiency, and the public should read more about sanitation and right living. For not only big business should be continued in a big way, but the *bigger* business of the good health of the Nation should be carefully builded and guarded, so that Great America may remain Great America, and that Americans may live to appreciate their prosperity, and to more fully enjoy good health throughout their broad land.

The best capital of the country is the good health of its citizens, and disease is its greatest burden.

## Conserving the Nation

These facts must be faced squarely: The United States is at war with a relentless foe, by no means subdued, and not likely to be subdued in any measurable degree until fresh blood from the armies of this Nation stains the battlefields of Europe. Neither do we mean by this that America will win this war. American will *help* to win this war, but in that winning no share of the glory must be taken from those other Nations, who have given lavishly of their own life blood for three long, bitter years.

If, then, America is to *help* win freedom for the world, she must expect to meet the sacrifice demanded in the depreciation of her man strength and she must look at once to the conserving of that strength by fostering the lives of her children.

While we are organizing everywhere Red Cross units, Y. M. C. A. recreation centers, libraries and tobacco funds for our soldiers, sailors, aviators and the great personnel that makes the fighting strength of a great Nation, let us not forget that the future of the same Nation lies in the hands of the children who are coming into the world today. Give them a fighting chance, too! Make it easy for them to grow into the defenders who may be called upon in turn to save us from a world catastrophe.—*Rhode Island Bulletin.*

## Save More Babies

BY DR. V. H. GWINN, *Assistant State Health Officer.*

The campaign now on to save one hundred thousand lives of children, five years old and under, in the United States, has the approval and co-operation of the Florida State Board of Health. If it is necessary to raise Liberty Bonds by the billions to maintain our Army and prosecute the war, it is also necessary to save the babies and rear healthy children, that we may have, not only a future military army but a future industrial army. It is not to our credit that we should go on from year to year without making strenuous efforts to prevent this unnecessary loss of life. One man alone cannot fight the battle against the common foe—infection—but it takes the combined efforts and intelligent co-operation of all.

While some of the warring countries are considering plural marriages and other like means to increase the population, we should not overlook the fact that it is the babies saved that count. If we should have a high birth rate—though we have not—all efforts should be

made to save the babies that are born, and make them healthy children.

Many of the physical defects which caused the rejection of practically one-third of the men coming up for examination in the first draft, are believed to date from some slight trouble neglected in early childhood or infancy. The Children's Bureau emphasizes the fact that a higher standard of physical fitness of the rising generation can be assured only by greater attention to the physical conditions of children, and the proper handling of the new born.

Prenatal instruction, proper medical attendance at the time of birth, infant welfare work, consultation stations, properly modified milk, are some of the essentials for the conservation of child life.

Once men believed that "God fixed the death rate" and death was regarded as an act of Divine Providence; but we are now coming to look upon the high rate of infant mortality as an evidence of human weakness and ignorance.

Florida has laws designed to protect people from impure food and to protect food from being contaminated.

Human life is, to a certain extent, a struggle with germ life, and when the good germs are over-powered by the bad ones, trouble begins. These germs are spread in many ways, and flies are one of the principal ways.

Flies have many opportunities to become filthy and carry disease germs into homes and on to food. The fly will light on the lip of a sleeping child, may leave disease germs and these germs swallowed may cause dysentery or diarrhoea. A doctor is called, diagnosis made and the next thing to consider is, source of infection. It may be explained that the child got the infection through food or drink—certainly something the child swallowed. A mother will take much time, going into details, to explain to the doctor or public health officer, how careful she is about her child having pure milk, etc.—at the same time a fly may be seen crawling over the face or lips of the child.

The removal of some of the sources of infection helps to lower the morbidity and mortality rate. To have all the sources of infection removed as far as possible within reason, is the object of the State Health Department.

The common house fly is particularly active in transmitting typhoid and dysentery, and almost every spring we have in this State outbreaks of dysentery, and principally among the children—simply because children, having less power of resistance, are more susceptible.

Are the children properly protected when they eat or sleep, from flies? Is the infant, in the cradle with its bottle of milk, properly protected from flies? These are questions every mother should consider. The State Health Department desires to make an appeal through the press to the mothers of this State to take special precautions to protect the infant and lend their valuable assistance so that the one hundred thousand may be over-subscribed.



If the State of Florida does her part in the public campaign of saving one hundred thousand lives five years and under, in the United States, her quota is approximately nine hundred and twelve—majority of these die under one year. The State Health Department realizes that the infant mortality in this State is entirely too high, and shall aid in every way practicable that Florida may reach her quota. We feel that Florida should keep up her quota if possible; not so much to prove her loyalty, but to do her duty toward the little helpless ones.

We hope that this child-welfare campaign will not only save one hundred thousand lives during the year, but will convince the most skeptical that health within certain limitations is purchasable, and that infant mortality is decreased by increasing child-welfare work. If as much money were appropriated for the first five years of a child's life as there is appropriated for the first five years of school life, there would be no question of decreasing the present infant mortality rate.

Statistics show that infant mortality campaigns consistently carried out produced reductions in death rate. The figures for New York show that the number of deaths for one thousand births in the first year of life has steadily declined since a determined campaign to "Save the Babies" was started. But the great value to the country of the child-welfare work will not be limited to one hundred thousand lives.

In the elimination of more of the causes of infant mortality, the health of the children will no doubt be improved and the morbidity rate be reduced. The children—(the future America)—will be started on their journey with proper care, wholesome food and much better promise of success in life.

It is estimated that in New Zealand one baby in twenty dies—in the United States one in ten dies. Methods by which the infant lives are to be saved are set forth by the Children's Bureau of the Department of Labor, Washington, D. C., and recent articles published by that Department may be secured by writing to Washington, D. C. for them.

### TABLE OF WEIGHTS AND MEASURES

Used as a standard of comparison for the Children's Health Conference in the exhibit Children's Bureau in the Panama-Pacific Exposition. Figures for children of three years and under are obtained from the more detailed anthropometric table published by the Council on Health and Public Instruction of the American Medical Association and are based on measurements of 4,480 babies in twenty-three States. As this table does not go above forty-two months, the figures for the older children are taken from Holt's measurements:

Age	WEIGHT		HEIGHT		HEAD		CHEST		ABDOMEN	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Birth .....	7.55	7.16	20.6	20.5	13.9	13.5	13.4	13.0	16.875	16.375
6 Months.....	17.875	16.0	26.50	25.875	17.5	17.0	17.375	16.75	17.125	16.625
1 Year.....	21.25	20.875	29.375	28.75	18.5	18.25	18.375	18.125	17.875	17.875
2 Years.....	27.5	26.625	33.5	33.5	19.375	19.0	19.624	19.5	18.75	19.0
3 Years.....	32.125	30.75	37.125	36.375	20.0	19.5	20.5	20.0	19.875	19.75
4 Years.....	36.0	35.0	38.0	38.0	19.7	19.5	20.7	20.7	.....	.....
5 Years.....	41.2	39.8	41.7	41.4	20.5	20.2	21.5	21.0	.....	.....

### WHY A BIRTH CERTIFICATE?

1. To establish identity.
2. To prove legitimacy.
3. To show when the child has the right to enter school.
4. To show when the child has the right to seek employment under the child labor law.
5. To establish the right to inheritance to property.
6. To establish liability to road and military duty, as well as exemption therefrom.
7. To establish the right to vote.
8. To qualify, to hold title to and to buy or sell real estate.
9. To establish the right to hold public office.
10. To prove the age at which the marriage contract may be entered into.
1. To comply with the law of the State of Florida.

### OUR BABY CROP PAYS BEST

BY MEIGS O. FROST

We have traced the pig to his primal lair  
 And the cattle-breeds we know,  
 The crops that cover our fertile fields  
 We have taught our men to sow.  
 Forage and fruit and the garden truck  
 We have studied—and damn the cost;  
 But the nation's babies we trust to luck.  
 Can we count the tale of the lost?

We have trafficked the breadth of the farthest seas  
 For the profits our tills might glean,  
 'Til the women of Asia work at ease  
 On a Yankee sewing-machine.  
 We have traded the trails our consuls trod;  
 We have delved as if work were play;  
 But the baby crop has been left to God  
 In the good old-fashioned way.

We have sent them up to the Great White Dome.  
 Our men in their long frock coats,  
 With an ear a-cock to the folks back home—  
 The people who cast their votes—  
 And the bureau-experts we had them hire  
 Have mailed us reports by the tons,  
 'Til we farm at ease in the sand or mire—  
 But chance has been raising our sons.

CHANCE—and luck—and the "will of God"—  
 But the careless days are past.  
 In the army-doctor's rejection-nod  
 We have seen the light at last.  
 War on the stoop and the slouching gait  
 We are waging from East to West  
 Since we learned the truth ere it came too late—  
 That our baby-crop pays best.

### SANITARY DANGERS FROM PETS

The State Board of Health desires to call the people's attention to the sanitary dangers of domestic pets. The State Health Officer has made an appeal to the sheriffs of the different counties of Florida, to aid in suppressing a disease now prevalent in this state—namely rabies. For the purpose of showing the public that not only rabies is conveyed by the dog—sometimes called the little domestic pet—but other diseases are carried also, the following letter from the United States Public Health Service is considered of such interest that it is deemed proper to quote it verbatim:

"A report on an epidemic of virulent smallpox in one of the southwestern States, submitted to the Surgeon General of the Public Health Service by one of the officers of that corps, sets forth with renewed emphasis the role that domestic pets may play in the transmission of disease, especially among children. The instance cited was that of a fatal case of smallpox in an infant in arms. The nearest case of the disease was in a house a block or so distant, and although the two families had no social relations, this apparently did not deter a dog belonging to the infected family from dividing his attention impartially between the two homes, eating at one place and sleeping at the other.

In no other way could the source of the infection of the baby be explained, than that the dog fondled by the children of the smallpox family carried the virus of the disease to the neighbor's baby. Similar instances have been noted before in connection with smallpox transmission, and cats and dogs both have been carriers of plague infected fleas—cases of bubonic plague so contracted having been observed by Public Health Service officers working in recent plague epidemics. The same household pets also have been charged in certain instances with the responsibility of carrying the infection of diphtheria, scarlet fever and other communicable diseases of children, as well as various intestinal parasites.

A disease that annually causes more than one hundred deaths in this country is rabies, and the role of domestic animals in spreading the disease is definitely proven speculation or circumstantial evidence being discarded.

Altogether therefore, it is perfectly evident that the citizen who keeps domestic pets maintains at the same time a very potential source of danger; a sanitary menace to his own household and to that of his neighbor. While this aspect of the subject applies year in and year out, it may well behoove the city dweller in these times of urgent demand for food conservation to seriously take council with himself as to whether he is justified in continuing to keep his dog or his cat, both of which are casual sources of mental annoyance to neighbors, as well as agents for graver potentialities."

## Control of Communicable Diseases

*From U. S. Public Health Service*

### Dysentery (Bacillary)

1. *Infectious Agent*: *Bacillus dysenteriae*.
2. *Source of Infection*: The bowel discharges of infected persons.
3. *Mode of Transmission*: By drinking contaminated water, and by eating infected foods, and by hand-to-mouth transfer of infected material; from objects soiled with discharges of an infected individual or of a carrier; by flies.
4. *Incubation Period*: Two to seven days.
5. *Period of Communicability*: During the febrile period of the disease and until the organism is absent from the bowel discharges.
6. *Methods of Control*:
  - (A) The infected individual and his environment—
    1. Recognition of the disease—Clinical symptoms, confirmed by serological and bacteriological tests.
    2. Isolation—Infected individuals during the communicable period of the disease.
    3. Immunization—Vaccines give considerable immunity. Owing to severe reactions their use is not universal, nor should it be made compulsory except under extreme emergency.
    4. Quarantine—None.
    5. Concurrent disinfection—Bowel discharges.
    6. Terminal disinfection—Cleaning.
  - (B) General measures—
    1. Rigid personal prophylaxis of attendants upon infected persons.
    2. No milk or food for human consumption should be sold from a place occupied by a patient unless the persons engaged therein occupy quarters separate from the house where the patient is sick, and all utensils used are cleaned and kept in a separate building, and under a permit from the health officer.
    3. All attendants upon persons affected with this disease should be prohibited from having anything to do with the handling of food.
    4. Necessary precautions against flies.

### Typhoid Fever

1. *Infectious Agent*: *Bacillus typhosus*.
2. *Source of Infection*: Bowel discharges and urine of infected individuals. Healthy carriers are common.



3. *Mode of Transmission*: Conveyance of the specific organism by direct or indirect contact with a source of infection. Among indirect means of transmission are contaminated water, milk and shellfish. Contaminated flies have been common means of transmission in epidemics.
4. *Incubation Period*: From 7 to 23 days, averaging 10 to 14 days.
5. *Period of Communicability*: From the appearance of prodromal symptoms, throughout the illness and relapses during convalescence, and until repeated bacteriological examinations of the discharges show persistent absence of the infecting organism.

6. *Methods of Control*:

(A) The infected individual and his environment—

1. Recognition of the disease—Clinical symptoms, confirmed by specific agglutination test and bacteriological examination of blood, bowel discharges, or urine.
2. Isolation—In fly-proof room, preferably under hospital conditions, of such cases as can not command adequate sanitary environment and nursing care in their homes.
3. Immunization—Of susceptibles who are known to have been exposed or are suspected of having been exposed.
4. Quarantine—None.
5. Concurrent disinfection—Disinfection of all bowel and urinary discharges and articles soiled with them.
6. Terminal disinfection—Cleaning.

(B) General measures—

1. Purification of public water supplies.
2. Pasteurization of public milk supplies.
3. Supervision of other food supplies, and of food handlers.
4. Prevention of fly breeding.
5. Sanitary disposal of human excreta.
6. Extension of immunization by vaccination as far as practicable.
7. Supervision of typhoid carriers and their exclusion from the handling of foods.
8. Systematic examination of fecal specimens from those who have been in contact with recognized cases, to detect carriers.
9. Exclusion of suspected milk supplies pending discovery of the person or other cause of contamination of the milk.
10. Exclusion of water supply, if contaminated, until adequately treated with hypochlorite or other efficient disinfectant, or unless all water used for toilet, cooking and drinking purposes is boiled before use.

### Anchylostomiasis (Hookworm)

1. *Infectious Agent*: Anchylostoma (Necator americanus).
2. *Source of Infection*: Feces of infested persons. Infection generally takes place through the skin, occasionally by the mouth.
3. *Mode of Transmissions* The larval forms pierce the skin, usually of the foot, and passing through the lymphatics to the vena cava and the right heart, thence in the blood stream to the lungs, they pierce the capillary walls and pass into the alveoli. Then they pass up the bronchi and trachea to the throat, whence they are swallowed and finally lodge in the small intestine. Also by drinking water containing larvae, by eating soiled food, by hand to mouth transmission of the eggs or larvae from objects with infected discharges.
4. *Incubation Period*: Seven to ten weeks.
5. *Period of Communicability*: As long as the parasite or its ova are found in the bowel discharges of an infected individual. Contaminated soil remains infective for five months in the absence of freezing.
6. *Methods of Control*—

#### (A) The infected individual and his environment—

1. Recognition of the disease—Microscopic examination of bowel discharges.
2. Isolation—None.
3. Immunization—None.
4. Quarantine—None.
5. Concurrent disinfection—Sanitary disposal of bowel discharges.
6. Terminal disinfection—None.
7. Treatment—Appropriate treatment of infected individual to rid the intestinal canal of the parasite and its ova.

#### (B) General measures—

1. Education as to dangers of soil pollution.
2. Prevention of soil pollution by installation of sanitary disposal systems for human discharges.
3. Personal prophylaxis by cleanliness and the wearing of shoes.

### Tuberculosis (Pumonary)

1. *Infectious Agent*: Bacillus tuberculosis (human).
2. *Source of Infection*: The specific organism present in the discharges, or articles freshly soiled with the discharges from any open tuberculous lesions, the most important discharge being sputum. Of less importance are discharges from the intestinal and genito-urinary tracts, or from lesions of the lymphatic glands, bone and skin.

3. *Mode of Transmission*: Direct or indirect contact with an infected person by coughing, sneezing, or other droplet infection, kissing, common use of unsterilized food utensils, pipes, toys, drinking cups, etc., and possibly by contaminated flies and dust.
4. *Incubation Period*: Variable and dependent upon the type of the disease.
5. *Period of Communicability*: Exists as long as the specific organism is eliminated by the host. Commences when a lesion becomes an open one, i. e. discharging tubercle bacilli, and continues until it heals or death occurs.
6. *Methods of Control*—

(A) The infected individual and his environment—

1. Recognition of the disease—By clinical symptoms and by thorough physical examination, confirmed by bacteriological examination and by serological tests.
2. Isolation of such "open" cases as do not observe the precautions necessary to prevent the spread of the disease.
3. Immunization—None.
4. Quarantine—None.
5. Concurrent disinfection of sputum and articles soiled with it. Particular attention should be paid to prompt disposal or disinfection of sputum itself, of handkerchiefs, cloths, or paper soiled therewith, and of eating utensils used by the patient.
6. Terminal disinfection—Cleaning and renovation.

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## FIFTEEN RULES OF RIGHT LIVING

PROF. IRVING FISHER

- 1—Ventilate every room you occupy.
- 2—Wear light, loose clothes.
- 3—Spend time in the open air, winter and summer.
- 4—Have lots of fresh air where you sleep.
- 5—Breathe deeply.
- 6—Avoid eating too much.
- 7—Do not eat much meat and eggs.
- 8—Eat various kinds of food.
- 9—Eat slowly.
- 10—Have your bowels move at least once each day.
- 11—Stand, sit and walk erect.
- 12—Avoid poisonous drugs.
- 13—Keep clean.
- 14—Work hard, but play, sleep and rest, too.
- 15—Be cheerful and learn not to worry.

## GROUND-ITCH.

*How It Is Gotten:* By going barefoot or wearing leaky shoes on damp ground that has been polluted by hookworm sufferers. An abrasion of the skin is not necessary. It may also be contracted about cow lots.

*How to Keep From Getting It:* Don't go barefoot or wear leaky shoes.

*How to Keep It From Spreading:* Cure all hookworm sufferers. Stop soil pollution.

*What the Encysted Embryos Do:* They burrow into the feet of children, producing ground-itch.

They then get into the blood stream; then  
They pass through the circulation to the lungs; here  
They are coughed up and swallowed. When  
They reach the intestine  
They grow to be adult worms, and then  
They suck the blood of the patient and  
Lay eggs as their parents did.

## HOW TO SEND SPECIMEN

First—Get one of the mailing cases sent out by the State Board of Health. Either get it from your family physician or send to the State Board of Health, Jacksonville, Fla. There will be no charge for it.

Second—Put a specimen of the stool, as large as a bean, into the bottle. Cork it tightly.

Third—Fill out in full the yellow blank that goes with it, giving the name, age, etc., of the patient.

Fourth—Put the specimen and the blank all in the mailing case and screw on the lid.

Fifth—Put on sufficient postage to carry, at letter rates, and await results.

## Bureau of Diagnostic Laboratories

By B. L. ARMS, M. D., *Chief*

During the next few months there will be a great increase in the number of cases of typhoid, malaria and hookworm infection. The laboratory can aid the people of the State greatly if specimens are sent from all suspected cases, and a laboratory diagnosis is of the greatest value in the scientific handling of these cases.

In the case of malaria, blood should be submitted before the administration of quinine and if the first report is negative other specimens should be sent. The best time to secure the blood is just before the chill is due for then the parasites are more readily found. In treated cases the parasites may be missed in spite of long and careful search and repeated tests should be made.

When the parasites have been demonstrated long and vigorous treatment should be given and as there is a tolerance for quinine in cases of malaria more radical measures can be adopted when the parasites have been found than would be the case otherwise and remember not all chills are caused by malaria. Determine the cause, then institute treatment of the cause, not of the symptoms.

Typhoid may co-exist with malaria and many cases of typhoid are mistaken for malaria especially in those districts where there is a considerable amount of the latter infection.

The State Board of Health now furnishes the preventive treatment for typhoid free to all citizens on request and the profession and the public should avail themselves of this method of avoiding this infection which is all too prevalent in this State.

Some one is to blame for every case of typhoid for it is only contracted when we take into our mouth some of the excreta of a typhoid patient or carrier. The route may be short when the infection is carried directly from the excreta to the food by flies or by the hands, or it may be long when the infection is allowed to contaminate a water supply. But whether short or long, this is the only way in which the disease is transmitted.

Intensive hookworm campaigns should be carried on and the laboratory will be glad to aid in every way. Not only will the Board of Health aid in the diagnosis but the treatment will be furnished free to the physicians who have the cases in charge. After a course of treatment specimens should be submitted for examination and a single negative report should not be accepted as proof that a cure has been effected. It should be borne in mind that a negative laboratory report means, not, that no infection exists, but that in the specimens submitted no infection was found.

As an illustration of this the following may possibly make the distinction more clear: A blood was received and examination showed a fair number of malarial parasites but two days later in spite of over two hours careful search none could be found. This, of course, does not mean that this was a cured case but that on account of the action of quinine on the parasites none could be found at that time.



## Briefs

This bouyant, bounding, pulsing vital force—(health)—is what makes living a joy, and life a success.

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### Hygienic Sinners

The waitress who carries a napkin under her arm and wipes off your plate with it.

The fruit stand owner who exhales on your apple and polishes it on his sleeve.

The cook who tastes from the pot and stirs with the tasting spoon.

The employer who does not supply adequate sanitary facilities for his help.

The street car conductor who holds the transfer slips in his mouth.

The restaurant toothpick and the cigar cutter.

The roller towel.

The milkman who takes the temperature of the milk with his finger.

The grocer who moistens his finger to lift the tissue paper he puts over your butter.

The janitor or porter who dry-sweeps the floor.

The great common public who spits, coughs and sneezes "at large."—*Kansas State Board of Health.*

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### Paste This on Your Mirror

The soldier has twenty-nine chances of coming home to one chance of being killed.

He has ninety-eight chances of recovering from a wound to two chances of dying.

He has only one chance in 500 of losing a limb.

He will live five years longer because of physical training.

He is freer from disease in the army than in civil life.

He has better medical care at the front than at home.

In other wars from ten to fifteen men died from disease to one from bullets.

In this war one man dies from disease to every ten from bullets.

This war is less wasteful of life than any other in history.—*Western Review.*

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### Complaints

Send in your complaints but sign your name and give post-office address. The State Board of Health wants to know where and when it can help. Anonymous complaints come to the State

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Health Department and land in the waste basket as they should. If a kick is justified—kick hard enough to be felt, and then emphasize it by signing your name in full.

The distinguished Dr. Milton J. Rosenau, of Harvard Medical School, says: "No man has the right to endanger his fellowman with infection, any more than he has the right to endanger him with physical injury."

## Drinking Water

Special precautions should be taken in regard to drinking water with the coming of the hot weather. One naturally drinks more and oftener in warm weather, and the city people will probably take "hikes" to the country. The boy scouts are busy and one sees soldiers almost everywhere.

The Florida State Health Department deems it proper at this time to mention the importance of securing good drinking water. We fully realize that there is a tendency on the part of some to exaggerate the danger of water as a disease bearer, which might be misleading to the general public. The facts are bad enough and no special language or scare-head lines are necessary to emphasize this importance.

The plain statement by the best authorities that, the greatest danger in water is pollution from human sources should be proclaimed throughout Florida. Every man, woman and school child should know this and realize its importance. Human pollution of water and soil becomes almost a night mare to any public health official.

The old open well may be mentioned because it is typical of Florida. It is usually a shallow well of approximately four feet in diameter and ten feet deep, with two or four feet of water standing in it, and with no special protection from the influent surface water.

When analysis of such water is made it usually shows too high a bacterial count for safe drinking purposes, even though it should not show the water to be infected with pathogenic micro-organisms.

A number of such wells, as just described and showing too high a bacterial count by our Sanitary Engineer, have been posted in the vicinity of Camp Johnston as unfit for drinking purposes. Such water may or may not convey disease. One cannot afford to take the risk.

One common mistake with the laity is that running water is the safest for drinking, as running water purifies itself after running a certain distance—this is an exploded theory.

We feel that it is our duty as public health officers to prevent the introduction of disease through drinking water and we also feel that it is the duty (as well as a privilege) of every father and mother to co-operate with us in our efforts to make healthier children and prevent sickness and death, in so far as it can possibly be done.

That certain diseases are conveyed through impure or infected water is an established fact. Typhoid fever and dysentery are the two principal diseases in this State that may be conveyed by contaminated water. When water is suspected or when there is any question as to its purity, samples should be taken and examined.

Examination of water used for drinking purposes will be made at the Laboratories of the State Board of Health without charge. In taking such samples great care should be exercised to prevent contamination through handling. Instructions as to the proper methods of taking water samples and the proper containers will be sent upon request.

The majority of the rural district wells are not deep enough and the character of the soil and the direction of drainage are not given proper consideration. If the land slopes toward the well, infection may be carried a long distance. The top of the well should be protected from the influent surface or waste water.

Typhoid and dysentery are far too common in this State and mortality from these diseases too high. These diseases can, to a great degree, be reduced by becoming certain that the drinking water is pure. Malaria and yellow fever are mentioned here only for their historical importance. Those two diseases were at one time associated with drinking water, but we know *now* that water plays no part in transmission of yellow fever or malaria, other than the breeding of mosquitoes.

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## ANNOUNCEMENT OF THE FREE DISTRIBUTION OF CERTAIN BIOLOGICALS BY THE FLORIDA STATE BOARD OF HEALTH

For a few years past it has been the custom for physicians to procure biologicals for use among their indigent patients from certain dealers and have them charged to the account of the State Board of Health. Since March 1, 1918, the date set for the inauguration of the present proposed plan, the State Board of Health refuses to pay for biologicals, except those which have been ordered by it, and all regulations governing the same, which have been promulgated in the past are hereby rescinded.

In lieu of former methods the Florida State Board of Health desires to announce to the medical profession and the public at large, the inauguration of a system, for the free distribution of a selected number of biologicals among the resident population of the State.

A contract has been made with the Lederle Antitoxin Laboratories for a number of their products, to be put up in special wrap-



pers, which will be distributed from the State Board of Health Laboratory at Jacksonville. Diphtheria antitoxin together with such other products as may hereafter be designated, will be distributed from the State Board of Health Laboratories at Pensacola, Miami, Tampa and about twenty-five of the largest cities and towns of the State.

In this way the more commonly employed biologicals will be placed, if not immediately at hand, within a short distance of all sections, so that they may be procured for an early and effective administration.

It will not be possible to have distributing agents in all of the incorporated towns, because of the expense incident to the carrying of the large stock which would be required. Should, however, an epidemic prevail in any town not listed as a distributing station, it will be possible to ship in quickly such a quantity and selection of biologicals as may be required, from the reserve stocks which will be maintained in the different laboratories and larger cities.

Diphtheria antitoxin has been put up for distribution in: 1,000, 5,000, 10,000 unit packages.

Tetanus antitoxin in: 1,500 and 5,000 unit packages.

The diphtheria antitoxin will be distributed by the following State Board of Health Laboratories and drug stores in the different cities:

CITY	DISTRIBUTOR
Jacksonville .....	State Board of Health Laboratory
Pensacola .....	State Board of Health Laboratory
Miami .....	State Board of Health Laboratory
Tampa .....	State Board of Health Laboratory
Ocala .....	Anti-Monopoly Drug Company
Wauchula .....	Beeson Brothers
Clearwater .....	Clearwater Pharmacy
Tallahassee .....	Cawthorne Drug Company
Lake City .....	Columbia Pharmacy
DeFuniak Springs .....	DeFuniak Drug Company
Key West .....	Fogarty Drug Company
Inverness .....	Inverness Drug Company
Chipley .....	Mitchell Drug Company
Starke .....	Mitchell Drug Company
Orlando .....	McElroy's Pharmacy
Live Oak .....	Payne's Pharmacy
Apalachicola .....	William Pooser
Okeechobee .....	Park Pharmacy
West Palm Beach .....	Speer's Pharmacy
Fort Pierce .....	Silver Palace
Panama City .....	Sims Drug Company
Gainesville .....	J. S. Bodiford
Fort Myers .....	Pixon & Schultz

### **Tetanus Antitoxin**

Tetanus antitoxin will be stocked only in the Jacksonville State Board of Health Laboratory, and requests for it should be made to the State Health Officer, Jacksonville Florida.

To secure diphtheria and tetanus antitoxin, the physician will be expected to fill out the receipt wrapped about the package and leave it with the distributor. On opening the box of antitoxin, a small card will be found which should be filled out and returned to the Executive Office at Jacksonville at the completion of the treatment, for the records of the Board.

### **Smallpox and Typhoid Vaccine**

These vaccines will be supplied by the Laboratory at Jacksonville. Requests giving the exact quantity desired, should be sent to the State Health Officer, Jacksonville, Florida, and the amount specified will be forwarded by first mail.

### **Anti-Rabic Vaccine (Pasteur Treatment)**

The Pasteur treatment will be ordered from the manufacturers by the State Health Officer, Jacksonville, Florida, at the telegraphic request of the local physician giving definite information concerning the location and the severity of the bite, the symptoms of the dog; and in the event of the examination of the dog's head in one of the laboratories, a report of the findings. The treatment is supplied free to the physician for use among the indigent upon the receipt of a properly filled out certificate of indigency, and case record blank. The certificate should be forwarded to the State Health Officer, at as early a date as possible, the case record blank just as soon as the treatment has been completed.

One point should be born in mind in relation to dog bites (or those from other animals) and this is, that no animal can convey rabies to a person or animal unless the animal be rabid at the time of the bite, (he is a rabid animal), and that if this is true the animal will die within a few days. It is bad practice to kill an animal that has bitten a person, if he can be confined, as sometimes this destroys the evidence of rabies, especially when done in the early stages of the disease.

The treatment will be ordered for physicians, for use in their regular practice, at the Board's special price of \$20.00. Checks should be made payable to the Lederle Antitoxin Laboratories, and mailed promptly to the State Health Officer at Jacksonville, Florida.

### **Antimeningococcus Serum**

A quantity sufficient for emergency demands will be kept on hand in the Laboratory of the State Board of Health, Jacksonville, Florida. The product is not for free distribution and will be shipped out only by parcel post, C. O. D., upon receipt of a telegraphic request from a physician of the State.

The Antimeningococcus serum is put up in special cylinder packages, containing thirty c. c.

### Anti-Rabic Vaccine (Pasteur Treatment)

The treatment is sent out daily by special delivery from the Lederle Laboratories. An effort is made to keep the physician supplied with a day's treatment ahead so that the administration can proceed uninterruptedly. The dose of anti-rabic vaccine is prepared by the Laboratory for the individual upon receipt of a telegram giving the necessary information as to the age, location of bite, etc.

The plan of administration is as follows:

- Dose No. 1—Immediately upon arrival of vaccine on first day of treatment.
- Dose No. 2—Four hours after first injection on first day of treatment.
- Dose No. 3—Four hours after second injection on first day of treatment.
- Dose No. 4—10 a. m. on second day of treatment.
- Dose No. 5—4 p. m. on second day of treatment.
- Dose No. 6—10 a. m. on third day of treatment.
- Dose No. 7—4 p. m. on third day of treatment.
- Dose No. 8—About 10 a. m. on 4th day of treatment.
- Dose No. 9—About 10 a. m. on 5th day of treatment.
- Dose No. 10—About 10 a. m. on 6th day of treatment.
- Dose No. 11—About 10 a. m. on 7th day of treatment.
- Dose No. 12—About 10 a. m. on 8th day of treatment.
- Dose No. 13—About 10 a. m. on 9th day of treatment.
- Dose No. 14—About 10 a. m. on 10th day of treatment.
- Dose No. 15—About 10 a. m. on 11th day of treatment.
- Dose No. 16—About 10 a. m. on 12th day of treatment.
- Dose No. 17—About 10 a. m. on 13th day of treatment.
- Dose No. 18—About 10 a. m. on 14th day of treatment.
- Dose No. 19—About 10 a. m. on 15th day of treatment.
- Dose No. 20—About 10 a. m. on 16th day of treatment.
- Dose No. 21—About 10 a. m. on 17th day of treatment.
- Dose No. 22—About 10 a. m. on 18th day of treatment.
- Dose No. 23—About 10 a. m. on 19th day of treatment.
- Dose No. 24—About 10 a. m. on 20th day of treatment.
- Dose No. 25—About 10 a. m. on 21st day of treatment.

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### ADVICE ON THE USE OF PATENT MEDICINES

*For Weak Lungs:* Purchase a nice chamois-lined chest protector; put it on your poodle dog, and take ten inspirations slowly before an open window each morning. Retire to a warm bath room and take a cold sponge above the waist line. This do daily.

*For Constipation:* Take three or four of Dr. Patent Medicine's Pink Pills. Roll each pill around the block, using your hand as propeller. Drink one pint of cold water before breakfast and at bedtime. Eat with regularity less meat and more vegetables. Wash your teeth with a toothbrush. Don't forget to thoroughly masticate your food.

*For Dyspepsia:* Procure a box of Charcoal Dyspepsia Tablets. Put them in your flower pot. Charcoal is good for house plants. Go to your dentist and have your teeth cleaned and filled. Avoid anger. If fatigued, rest before eating. Select a good, wholesome diet, avoiding condiments and spices. Avoid midnight lunches, consisting principally of salads and coffee.—*North Carolina Health Bulletin.*

## ADOLESCENCE

Mr. Smith had two children, a girl of 14, and a boy of 12. And another was impending. The family took great pains to keep the youngsters in ignorance. Mary was sent to stay with Aunt Lucy and Alfred went to visit Uncle George. Finally the new member arrived and Mr. Smith went over to get Alfred.

"You've got a new baby brother," he said. "Here's a dollar. Send a telegram to sister and tell her about it."

Pretty soon Alfred returned and handed his father some change.

"Why," said the father, "that telegram cost more than this."

"Yes," said Alfred, "the one you gave me would, but I sent one of my own. I just said, 'I win, its a boy.'"—Exchange.

## FATHER AND SON

The British officer had taken as a prisoner an elderly German officer, who was very nasty about it, and remarked that he could console himself by the thought that his officer son was killing "twenty pigs of Englishmen a day." When the captive arrived at Southampton a cheery voice came from the quay: "Hullo, father! Have they got you, too?"—*London Opinion.*

If the Kaiser ever faces any captured American officers he will find that while he possibly may be able to stare a general or a major out of countenance, he can not outglare a second lieutenant.—*Kansas City Star.*

Says Uncle Eben in the Washington Star: A friend is a man who will laugh at your stories even though they aint so good and sympathize with your troubles, even though they aint so bad.

## EASY TO GET ALONG WITH

Mrs. M. J. asks: When is hardening of the arteries likely to begin?

It may begin at any age, but it generally shows itself after 40 unless due to some congenial disease.—*El Paso (Tex.) Times.*

Unusually charming is the following apostrophe, widely quoted but with authorship unrevealed:

## I AM THE BABY

I am the Baby.

I am the youngest Institution in the World—and the oldest.

The Earth is my Heritage when I come into being, and when I go I leave it to the next Generation of Babies.

My mission is to leave the Earth a better place than I found it.

With my million little Brothers and Sisters I can do this, if the World does not impose too many handicaps.

Now I need Pure Milk and Fresh Air and Play.

When I am a little older I shall need good Schools in which to learn the Lessons of Life.

I want to live, laugh, love, work, play.

I want to hear good music, read good books, see beautiful pictures.

I want to build Houses and Roads and Railroads and Cities.

I want to walk in the woods, bathe in the waters, and play in the snow.

I am Yesterday, To-day, and To-morrow.

If you will make my way easy now, I will help you when I grow up.

I am your hope—I AM THE BABY.